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# A RECENT OUTBREAK OF RÖTHELN.

BY

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DURING the summer months of 1891 German measles was to some extent prevalent in Clifton. As it is a disease affecting principally young persons, and as it is exceedingly infectious, it was natural to expect that large schools would be visited by it. This was the case in Clifton College during the summer term. In the previous term ending at Easter there were some cases in the Junior School, mainly affecting one house. The short Easter holidays were not sufficient to get rid of the infective possibilities of the disease in the neighbourhood, and consequently it broke out afresh soon after the commencement of the summer term.

It is absolutely impossible to stop an epidemic of measles, either of the ordinary or the German type, in a large school. Both forms are so infectious in their early stages that when one case takes place in a school, most probably

several others have been already infected, and so the disease goes on until every unprotected boy has been attacked. Dr. Haig Brown, the medical officer of Charterhouse, states that in 1886 one case of rötheln or German measles was introduced into a boarding-house in the school, and from that case, in spite of every precaution by immediate isolation and disinfection, the epidemic went on until over 200 boys had been attacked. This is the experience of most large schools.

Before recording the details of this outbreak, which presented some features of a remarkable and perplexing character, I may briefly notice the present position of our acquaintance with this disease, which, in addition to its puzzling clinical features, labours under the misfortune of possessing a bewildering nomenclature.

For one disease to be called by no less than seven different appellations is a misfortune, and leads to confusion. Rötheln, rubeola scarlatinosa, rubeola morbillosa, rubeola notha, epidemic roseola, rubella, and German measles form a conglomerate specimen of medical nomenclature which is irritating and misleading both to the profession and to the lay public.

Possibly this may arise from the fact that rötheln (as I shall call it) is comparatively a new disease. It had no place in the *Nomenclature of Diseases* before the year 1885, and yet long before that it had been the subject of comment, and up to the present time there are few diseases about which so much controversy has raged. It is a disease which is seen only in epidemics, and the type and character of these epidemics appear to vary so much that the recorded experience of one observer seems flatly to contradict that of another. Some describe it as false measles; others as an anomalous scarlet fever; and a

third class have imagined it to be a hybrid, a disease partaking of both these exanthems, and becoming in this way a kind of pathological monstrosity.

These views, however, have now ceased to exist, and I suppose that at the present time there is a generally-accepted belief that rötheln is a distinct exanthem, giving no protection to the individual who has had it either against the infection of measles or scarlet fever.

I will now give the results of my experience during the prevalence of an epidemic which took place among the boarders of Clifton College during the months of May, June, and July last.

The epidemic began on the 19th May, and, in spite of every precaution taken in the way of immediate isolation, the disease spread from house to house until 91 boys had been attacked. Its manner of progress was very similar to that which I have always observed in epidemics of ordinary measles. That is to say, there was a fresh outbreak of the disease about once in fourteen days, which I think marks the period of incubation pretty fairly, although in some cases the period appeared to be much shorter. By far the majority of the cases assumed the character with which we are all familiar, and which for the sake of order I will briefly recapitulate.

The boy or girl attacked with that mild form of rötheln which was prevalent last summer experiences none of the prodromata of the other exanthems, neither vomiting nor shivering, and little or no *malaise;* possibly there may be a little headache, stiffness in the neck, or a little sore throat. The first thing, as a rule, which attracts the attention of the patient or those about him is the rash. There is a pink mottled rash observed over the chest and back, on the arms, round the neck, and behind the ears.

The spots are separate, slightly raised, but not crescentic. There is often slight swelling of the post-cervical glands. There may be catarrhal swelling in the throat, but no implication of the submaxillary glands. The temperature is seldom above 100° or 101°. This condition lasts from four to six days. The rash fades, all the symptoms disappear, and the whole thing is over. There may be a little branny desquamation, but very little.

Now if this type of the disease had been maintained all through this outbreak in the school, this paper would not have been written. But I had once before observed a departure from this ordinary type of the disease, and I was on the look-out for something of the kind again. The instance to which I refer was this.

At the end of the summer term of 1890 a boy had been under treatment in the sanatorium for rötheln of the type I have just described. He had got quite well apparently; his rash had disappeared. He was the only patient in the sanatorium. He was sent home at the end of a fortnight. Immediately on his arrival at home I received a telegram from his mother, informing me that he had suddenly developed a bright scarlet rash over his body, and asking me if there were any cases of scarlet fever either in the sanatorium or in the school. I replied in the negative. In a few days I received a letter informing me that the physician in attendance had decided that the attack was a recrudescence of rötheln, and that the boy was convalescent, but was desquamating.

This in a more extended and intensified form is the experience I have had with this disease during the last summer term.

Out of the total number of 91 cases which occurred, there were thirteen in which the scarlet rash was

developed. In *seven* of these the primary rash had all the characters of the simple pink mottled eruption of rötheln, and the secondary rash, which developed at a period varying from two to six days after the first, was so like that of scarlatina as scarcely to be distinguished from it. In five cases the primary rash was not pink or mottled (at least when I saw it first), but a general uniform red eruption over the body.

I will now give some brief details of these cases. A boy, B., was admitted on the 21st June with the mottled pink rash of rötheln (he had had ordinary measles previously). The rash covered the chest and back; there was a little on the face and behind the ears. He had no fever or sore throat. The rash faded on the third day, and he was allowed to get up. Six days after he had headache, sore throat, a temperature of 101°, and a bright red rash covered the body. The temperature was normal on the third day after the rash appeared, and he never showed the least sign of desquamation.

A boy, L., from another house, came in on the 22nd June with the mottled pink rash, and a previous history of measles. Three days afterwards the red rash appeared over the trunk, arms, and legs. In this case it was very evanescent and faded in about forty-eight hours, and was not attended with any fever, sore throat, or subsequent desquamation.

A boy, V., again from a different house, came in on June 23rd, also with a previous history of measles. He had the mottled pink rash over the chest, back, and abdomen, without any fever. On the fourth day after admission the red rash suddenly developed over the body. The fauces were covered with a similar rash, but there was no swelling of the tonsils. The temperature was

101° on the first day, but fell to the normal point on the third, and never rose again. This boy desquamated a good deal, but it was principally branny in character.

A boy, B. (2), from the same house as the last case (also with a previous history of measles), came in on the 26th June with the pink mottled rash, and without any symptoms of pyrexia. The rash faded on the third day. On the 1st July, five days after admission, he developed a bright red rash over the whole body, and simultaneously his temperature rose to 103°, but steadily fell from day to day till it reached the normal on the seventh day after its appearance. He had a good deal of sore throat, but hardly any swelling of the tonsils and no glandular implication. Desquamation in this case was very marked and prolonged. He was not allowed to leave the sanatorium for six weeks after his admission. This was one of the cases which made diagnosis very difficult; for the symptoms were so identical with those of scarlet fever, that I do not hesitate to say that most medical men, seeing it for the first time, would have pronounced it to be so. But I will discuss this question farther on.

The fifth case, that of E., from a third house, presented symptoms almost identical with those of B. (2). He came on June 29th, with the usual mottled rötheln rash, from which he apparently recovered, and on the sixth day after admission developed a bright scarlet rash, with some vomiting and sore throat. His highest temperature was 101.3°. The rash disappeared on the seventh day. He desquamated a good deal, and was kept for six weeks in the sanatorium.

The sixth case, A., from a fourth house, was also admitted on the 29th June for rötheln similar to the others. The rash faded on the third day. He was then

attacked with sore throat and fever, having a temperature of 103° on the first day, with a bright red rash over the body. This faded with the fall of temperature, and had quite disappeared on the sixth day. There was some desquamation, but not so much as in the previous cases. This boy went home at the end of a month from the beginning.

The seventh and last of this class of cases was that of C. (2). He came from a fifth house on the 27th with rötheln. He was not at any time associated with any of the previous cases. He had the mottled rash for three days. He then developed a peculiarly bright red rash over the body, without any sore throat. He had very slight fever, but the constitutional disturbance was at no time commensurate with the intense character of the rash. In fact, the boy did not feel ill at all. He remained fourteen days in bed, because, although the scarlet rash faded about the sixth day, it was succeeded by a densely-scattered eruption of small pustules over both hips and thighs, without any constitutional disturbance whatever except for one day.

Then I may mention, in addition, the case of one of the masters' sons, a boy, C. (3). I mention it because I watched this case very specially, and examined him several times in the day during the first few days of his illness, and I was able to satisfy myself that the separate spots of the pink mottled rash of rötheln gradually and perceptibly coalesced and deepened in colour, until the whole body was covered with a uniform smooth red eruption.

All these cases, with the exception of C. (2), came into the sanatorium within a few days of each other, and were more or less together in the infectious house. They

came from *five* different houses. They all began with the ordinary pink rash, and then all developed the scarlet rash within periods varying from three to six days.

There were, however, *five* other cases, which differed from those I have described in this respect, that they did not develop the usual preliminary mottled rash at all; or if it was developed, it lasted such a short time as not to have been noticed either by myself or by any of the nurses or house matrons.

A boy, C. (4), was admitted on July 2nd with a bright red rash over the body. Temperature, 101°; no sore throat. His temperature was normal on the third day, and remained so. The rash faded on the fifth day. On the sixth it reappeared over the face and neck, without any fever, and two days after it appeared profusely on the legs. In this case there was no desquamation whatever.

There were two other cases very similar from the same master's house within a week, and a third, the son of one of the masters, who was under the care of Dr. Rogers[1]. They were very mild in character. In two there was neither sore throat nor desquamation.

But on the 11th July a boy, C. (5), was admitted from a house from which no other case of scarlet rash had come; and I must confess it was a case which puzzled me very much, and about which I was unable for some time to make up my mind on the question of diagnosis.

When I was sent for to see this boy at his master's

[1] Dr. Rogers has furnished me with the following facts: The patient whom he attended was admitted to the sanatorium on the 12th July with the scarlet rash already described; on the 14th the rash had nearly gone and his temperature was normal, and the sore throat had disappeared. Some fine branny desquamation began on the 26th, and spread slowly over the body and limbs, and was well marked on the hands. At no time was there any albuminuria, or was the boy in the least degree unwell.

house, I found him apparently very ill. He had severe sore throat, a temperature of 103°, and a bright red rash over the entire body. He was removed to the infectious part of the sanatorium at once. The case had all the appearance of scarlet fever. As soon, however, as the rash became fully developed he began to get better; he never had an anxious symptom. He was kept for six weeks in the sanatorium, and desquamated a good deal. But now comes the puzzling part of the case. I looked into the previous medical history of this boy. I found a record of his having had scarlet fever three years before. I made careful inquiry of his parents, and was informed by them that this was perfectly true, and they stated, moreover, that the attack was followed by profuse and prolonged desquamation. This was the last case of this red rash which occurred.

This is then a brief detail of certain facts occurring in this outbreak: a total number of 91 cases, and out of that 13 special cases, 8 of whom developed a secondary scarlet rash, succeeding a preliminary pink mottled rash, and 5 exhibiting the scarlet rash from the beginning, without the preliminary pink rash at all.

I will now make a few criticisms on these special cases. The question which naturally occurred to my mind when these cases of scarlet rash began to appear was this: Was this a new departure, a new feature in the history of rötheln, or was it possible that a mild case of true scarlet fever had in some way got into the sanatorium and had infected the others?

But then the difficulty arose of accounting for cases which had not presented any preliminary pink rash, but who developed the scarlet rash in their masters' houses and not in the sanatorium. And there was the case of

C. (5), whose symptoms were so like those of scarlet fever, and yet with the clearest evidence that he had had severe scarlet fever three years before.

I need not say that under these circumstances I availed myself of the opinion and assistance of some of my medical friends. I asked my friend, Dr. Fox, to see some of the earlier cases. I forget at this moment if he gave a positive opinion one way or the other, but I know that, observing the desquamation which was going on in some of them, he strongly counselled great precaution about sending the boys home.

Then if these cases were undoubtedly scarlet fever, I was of course bound to report them to the Medical Officer of Health. So I asked Dr. Davies to look at them, which he very kindly did, and he gave it as his opinion decidedly that they were not cases of scarlet fever. Then my friend, Dr. Harrison, who is so experienced in cutaneous disease, very kindly also came to see the boys, and he agreed with Dr. Davies that these were instances of rötheln almost indistinguishable from scarlet fever.

Dr. Rogers, to whose case I have referred, also agreed in opinion with Drs. Davies and Harrison. Finally, I arrived at the conclusion myself that I was not dealing with scarlet fever, but with rötheln—or that form of it which has been called rubeola scarlatinosa—and for the following reasons:

(1) There were no cases of scarlet fever in the school or in the neighbourhood. Rötheln, and that alone, was prevalent; and I think it very unlikely that the infection of scarlet fever could have gained an entrance into the sanatorium, isolated as it is.

(2) The clinical features of the cases presented aspects

different, when analysed and observed for some time, from those of scarlet fever. The prodromata, whether in the cases of secondary rash or in those where the red rash was not preceded by the pink mottled rash, were so very short as not to be noticeable.

(3) The throat symptoms were not nearly so severe as one would have expected to have found them where the rash was so prominent a symptom. There was general redness of the fauces, but very little swelling of the tonsils.

(4) In not one of these cases could I say for certain that they presented the usual characteristic strawberry tongue of scarlatina. The tongue was mostly covered with white fur, with slightly red tips and edges, but there was no special prominence of the papillæ.

(5) There was no glandular implication. There was some tenderness of the post-cervical glands behind the sterno-mastoid. This has been considered to be the distinguishing feature of rötheln. By some it is regarded as pathognomonic. I should hardly be disposed to go so far as that; but at any rate there was no such glandular implication as might have been expected in such cases had they been scarlet fever.

(6) I think also there were some distinguishing points in the rash itself. It was bright scarlet certainly, but it had more of the uniform velvety look of erythema than the punctate rash of scarlatina.

(7) Another strong point of difference appeared to me to be the entire want of all proportion between the intensity of the cutaneous rash and the general condition of the patients. The case of C. (2) for example, where the rash, beginning as a pale pink mottled eruption without any pyrexia whatever, developed so rapidly that

in a single night the whole body was bright red, and yet with very little constitutional disturbance; and in most of the cases, when the rash was fully developed, the symptoms began to abate. This is not the usual behaviour of scarlet fever. As a rule, the trouble begins with the rash.

(8) In not one case throughout was there a single instance of any kidney complication. In every one of these 13 cases the urine was examined daily, and no trace of albumin was ever discovered.

(9) Lastly, several of the milder cases, where there had been a slight red rash with some branny desquamation, were sent home at the end of three weeks. In not one instance was any other member of their families attacked.

But on the other hand, there was one feature in these cases which made me hesitate for some time before pronouncing a decided opinion that they were *not* scarlatina cases. That was, the unmistakable desquamation which took place in several of them, I may say, in all of those in which the pink rash was followed by the red rash. It was more than branny desquamation, it was flaky, and it was well marked on the palms and soles of the feet. But there were some cases of the red rash in which there was no peeling at all, and this leads me to the opinion that the amount of desquamation is not dependent upon the intensity of the rash even in scarlet fever. I had a boy under my care later on who had a sore throat. His house matron said she thought he had a rash on his chest the night before I saw him, but I could not see it. However, as a precautionary measure, I took him to the infectious part of the sanatorium, and he desquamated like the worst case of scarlet fever I ever saw.

I have now stated the facts respecting this outbreak and the reasons which led me to conclude that these cases were instances of rötheln, or, if the name is more suitable, of rubeola scarlatinosa.

I find a record in the *British Medical Journal* of 1887, Vol. I., page 826, of two epidemics at Charterhouse School, published by the medical officer, Dr. Haig Brown. One occurred in 1886, when there were 202 cases. There was no resemblance to the rash of scarlatina among any of the cases in this outbreak; but in the year 1884, 13 cases of infectious disease took place in which the rash exactly resembled that of scarlatina, and there was consecutive peeling, but no nephritis. But the most important part was, that five out of the 13 had previously had scarlatina, and that not one of these contracted rötheln in the epidemic in 1886, although nine were still in the school and were exposed to infection like the other boys. Dr. Brown concludes that there are two forms of the disease, or rather two varieties of rash—one scarlatinal, the other rubeoloid.

Dr. Liveing, in a clinical lecture on Rötheln, delivered in 1874, states that the premonitory fever is generally mild: but in some of Dr. Haig Brown's cases the temperature reached 105°; and Dr. Fox, in his observations on Temperature, published in the *Medical Times* of April, 1870, states that in the first two days of rötheln the temperature rises to 104°. Dr. Liveing confirms the experience I have described as to the coalescing of the pink measly rash, the uniting of the patches, and the development of a uniform red colour over the entire body resembling scarlatina, and that its disappearance is followed by desquamation and sometimes by albuminuria. But with regard to the development of the secondary

rash which I have described, Dr. Liveing makes this pertinent remark, that "this disease perhaps accounts for some supposed errors of diagnosis, when a patient, said by the first practitioner who has seen him to be suffering from measles, is pronounced by a second under whose notice he comes at a later period to be suffering from scarlatina."

I must not take up further space in discussing the question. In such cases the diagnosis is difficult, and it is best to be on the safe side and to take such precautions as may be necessary until desquamation has entirely ceased.

## ON A RARE FORM OF SPINA BIFIDA (SYRINGO-MYELOCELE).

BY

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F. G., aged four months, was admitted into the Children's Hospital in April, 1891, under the care of Mr. Norton, to whose kindness I am indebted for permission to record the case.

A markedly pedunculated spina bifida existed in the lumbo-sacral region. It was as large as an ostrich's egg, and only partially covered with skin. In places the membranous wall was very thin. The head was abnormally large, and the interparietal fissure open. No craniotabes was present. The child seemed blind, and squinted in with the right eye. The right leg was twisted

outwards below the knee-joint, and there was marked talipes calcaneus and convexity of the sole. The other leg was normal. No movement was observed in either lower limb.

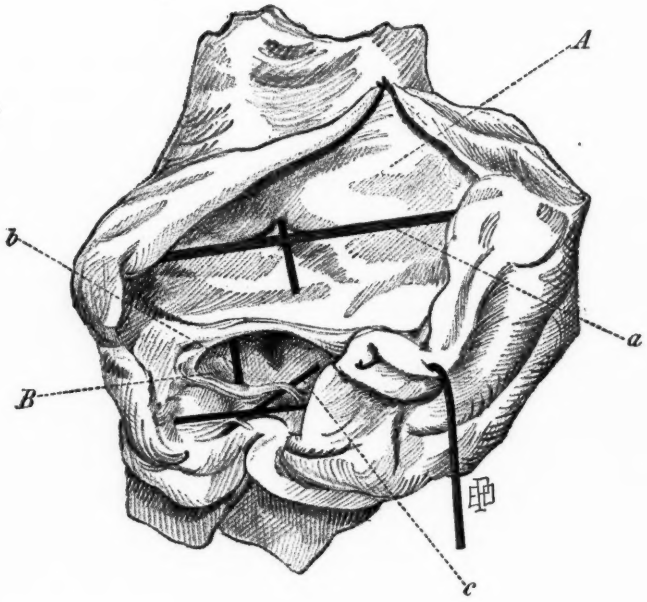
On the 18th, thirty minims of Morton's fluid were injected into the sac, the baby being kept in the horizontal position.

On the evening of the 19th the temperature went up to 102°. There was no leaking from the sac.

At five a.m. on the 20th the child was found to be comatose, but not convulsed. When examined at ten a.m. it was still unconscious, and had occasional slight laryngeal stridor. There was external squint in the eye that before squinted in. Extreme tension of the anterior fontanelle was present, so that it felt almost as hard as the surrounding bone. The pulse was 160. The child only lived a few hours after these observations were made.

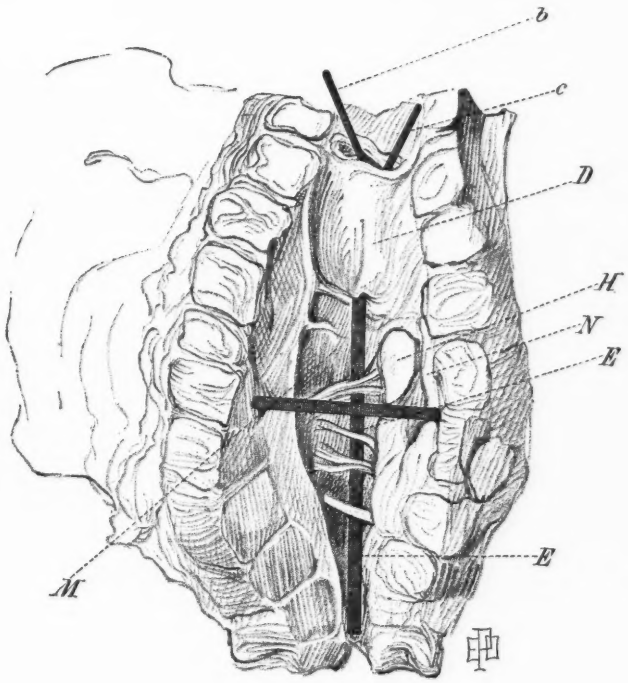
Unfortunately, permission could not be obtained for a general *post mortem*, but only to examine the spine. The anterior fontanelle lost its extreme tension after death; and pressure on the spina bifida in no way altered the tension there.

On opening the spina bifida it was found to consist of two quite separate sacs, the upper one being the larger. They appeared to communicate with the central canal by very small openings, and resembled meningoceles. But on opening up the vertebral canal from the other side, through the bodies of the vertebræ, the cord was found to have an enormously dilated central canal, and to bifurcate—the two parts being separated by a small bony projection—and on passing a probe down the dilated central canal and along one of the divisions beyond the




The spina bifida laid open from behind, showing the large sac *A* and the small sac *B*.

The glass rod (*a*) holds the walls of the sac open. Passing into the sac underneath the rod (*a*) and at right angles to it is another rod [marked (*c*) in the other drawing] which goes down the dilated central canal. (*b*) is the rod also marked (*b*) in the other drawing passed from the central canal into the sac *B*. The glass rod (*c*) in this drawing has been represented passing through the lower margin of the inferior sac as if it were a nerve root.




The anterior aspect of the cord. The vertebral column divided in the centre, and held open by a glass rod.

*D*. The cord with dilated canal, down which the two glass rods (*b*) and (*c*) are passed, which appear in the sacs on the other side, as shown in the other drawing.

*EE*. Glass rod passed under nerve roots.

*H*. The process of bone separating the bifurcated extremities of the cord *M* and *N*.

point of bifurcation, it entered the upper larger sac; and when passed through the canal in the other portion of the cord, it entered the lower and smaller sac; and the two divisions of the cord were seen to end in the two sacs respectively. From the wall of the sacs the nerve-roots arise, and their fibres can be traced into the wall, and be seen to lie just beneath the inner thin coat. Ths nerve-fibres have been examined microscopically and are normal; but in some of the roots there seems to be a great amount of fibrous tissue, with very few nerve-fibres. Microscopic sections through the wall of the spina bifida do not show any nerve-elements, probably because the inner lining of the sac separates so easily from the other coats, that it is not seen in most of the sections; and as the nerve-fibres were connected with its attached surface, they probably separated with it. In these sections the wall is seen to be composed of an outer layer of skin; then a dense layer of thick connective tissue, and then a looser areolar tissue from which the smooth lining membrane separated.

On the surface of this lining membrane in the posterior part of the spina bifida is a brown patch composed of a fine network of vessels visible to the naked eye. These are seen to be very thin-walled when examined under the microscope. The sections of the wall from the same part also show this nævoid tissue, in the loose areolar tissue beneath the lining membrane in the form of numerous large vascular spaces, with very thin walls. In size they resemble veins; but in the thinness of their walls they are like capillaries. They contain blood in nearly every instance.

The fluid in the sac was watery, like the fluid usually present in a spina bifida, but contained no trace of sugar.

This form of spina bifida (syringo-myelocele) in which the sac is formed by a dilatation of the central canal of the cord is very rare. Out of 125 cases examined by the Committee of the Clinical Society, there were only two cases. I have examined the specimens of spina bifida in the College of Surgeons' Museum, and cannot find a single specimen of it there.

The complete division of the sac into two is also rare. Incomplete division is, however, not uncommon; there are several such specimens in the College Museum.

Attention should also be directed to the bifurcation of the cord, and the separation of the two halves by the bony process.

The position of the cord in the vertebral canal is what we often find in spina bifida—it occupies the position of fœtal life; *i.e.*, the whole length of the canal. In this case the spina bifida is lumbo-sacral, and yet it is formed by the cord, which passed down the whole length of the vertebral canal.

The evidence that this specimen is a syringo-myelocele consists in the fact that the central canal ends in the sac, and that the nerve-roots arise in and course through the wall of the sac, and do not cross its cavity as in a myelocele.[1]

Its causation is of some interest. Not only must there have been a failure of the mesoblastic plates to close over the cord, as happens in all cases of spina bifida, but the neural canal can never have become obliterated by the growth of the nerve-elements of the cord. Consequently, we should not expect much nervous tissue in the wall of the sac, or the nerve-roots arising from it, a condition

[1] The specimen is in the Museum of the Children's Hospital, where I shall be glad to show it to anyone interested in it.

already referred to in connection with this case. The connective tissue found so abundantly in the roots would, on the other hand, probably own a mesoblastic origin, and might be present when the nerve-fibres of epiblastic origin might be deficient. Again, as the medullary sheath is not formed until after the axis cylinders, there may be nerve-fibres formed only of axis cylinders, both in the sac-wall and nerve-roots, which have not gone on to the development of medullary sheaths, and so are not demonstrable by osmic acid in the sections.

There is one other point which, although it does not elucidate the pathology, yet is of interest from its bearing on treatment. The opening of the large sac of the spina bifida into the central canal was obstructed by a little fine lymph, from the injection of Morton's fluid—the early stage of a possible cure, had the child lived. Clinically, there was nothing to show the presence of the two sacs, and yet, of course, only one could be injected. This may explain the diminution in size or cure of a large portion, but not the whole of a spina bifida after injection.

## THE QUANTITATIVE ESTIMATION OF THE KNEE-JERK.

BY

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THE state of the knee-jerk, as reflecting amongst other things, and often very graphically, the functional condition (to speak generally) of the spinal cord, would appear to be worthy of very close and accurate clinical observation.

Comparison of the writings of the leading classical authors on nervous diseases shows that there is often much disparity, amounting at times to absolute contradiction in statement, as to the condition of the knee-jerk. An inherent individual variability must ever be reckoned upon, as accounting for some amount of disparity; but after the theoretical elimination of this, there still remain some such causes as the following:

1. Non-mention of the stage of the disease to which the recorded state of knee-jerk corresponds.
2. Faulty position of patient's body during elicitation of the jerk.
3. Faulty position of limb.
4. Varying strength of percussion.
5. Varying point of impact on patellar tendon.
6. Varying ocular judgment of jerk amplitude.

I believe that the instrument which is the subject of this article, whilst eliminating many variation factors, affords a ready clinical means of testing for the presence or absence of the knee-jerk, and when the jerk is present, its character, including its amplitude and, if necessary, time-interval.

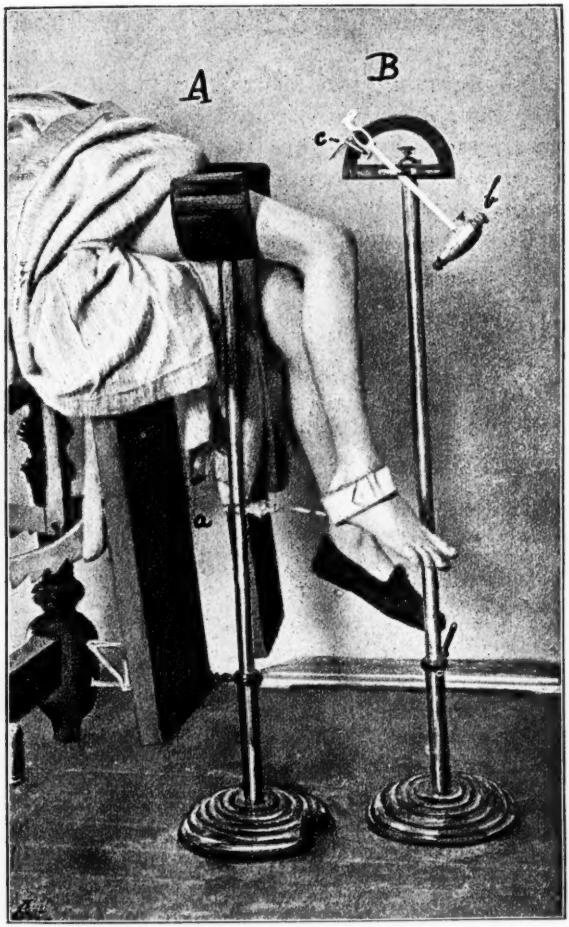
The instrument[1] (see illustration), which may be termed a "Jactometer," is composed of two main parts:

**A** A limb-rest, with amplitude registration apparatus (*a*).

**B** Percussion stand.

**A** The limb-rest consists of an upright fixed in a wooden foot-piece, which has a crescentic portion removed, so that in the case of a very short limb being tested no inconvenience is occasioned by the contact of the foot-piece of **B**.

[1] Messrs. Down Bros., of St. Thomas's Street, London, S.E., exercised much care in carrying out my design.


A
B
c
a

The upright is so constructed as to be adaptable, in major degrees, by the unscrewing and removal of one of its component rods; in minor degrees, by a telescopic sliding arrangement with hand-screw, to any convenient height requisite for the thigh, which rests on a wide padded trough terminating the limb-rest.

The quantitative registration of any particular jerk is effected by means of a graduated (English and metric systems) tape, which being fixed at one end to the foot by means of a padded strap, is free to unroll itself, by a very slight pull, from off the tape-roll (*a*), which, having a lateral spring for the purpose, readily allows the tape to run out when tension is applied by the projecting foot, but does not unroll any tape by its own acquired momentum; so that two desiderata are thus secured; (1) the least possible amount of resistance is offered to the projecting foot, and (2) no fallacious amplitude is contributed. The tape-roll is so attached to the upright that, by sliding it upwards or downwards, any convenient level required by the position of the foot may be obtained.

**B** The percussion stand.

The foot-piece and adaptable upright, as in **A**. At a right angle to the upper extremity of the upright is placed a graduated arc, which by means of a sliding joint and screw in the head of the upright is horizontally adaptable, so that percussion of the tendon at its inner, middle, or outer part may be secured at will.

The percussion is effected by means of a lever hammer (*b*) pivoted at the centre of the base of the arc. The head of the hammer is lower, somewhat torpedo-shaped, tipped with a layer of india-rubber, and weighs 13 oz. Five ounces of this are removable by the screw and central weight arrangement. By this device the relation of the ampli-

tude to the momentum of impact may be estimated. The upper end of the hammer projects beyond the arc, and is bent at a right angle so as to come in contact with a Marey tambour (not shown in illustration), fixed at a convenient point of the arc, for the time-interval estimation. In order to deliver a stroke, the upper end of the lever is drawn towards the patient and fixed at the required angle on the arc, where a small horizontal pin attached to it is held by a tip-catch (*c*). Slight pressure on that end of the tip-catch nearer the patient liberates the hammer, which falls, delivering a stroke varying in momentum with the amount of weight of its head and the angle at which its upper end was held, and varying in point of percussion with the position of the horizontal joint above referred to: other things being equal.

The apparatus is obviously equally adaptable to either limb.

The observation is taken with the patient preferably (though not necessarily) in the supine position and at rest; the limb to be tested rests easily and horizontally over the limb-rest, which has been previously adapted to the required height, the centre of the trough being at about the middle of the thigh; thus any pressure on the sciatic nerve or posterior part of thigh generally is obviated, and the limb is in the best possible position for elicitation of the knee-jerk. The leg hangs freely and comfortably. The foot-strap is then adjusted and connected with the tape and the tape-roll, which is brought to the level of the heel. The observer next adjusts the percussion stand, and taking a seat facing the patient, and with one foot resting on the foot-piece in order to steady it and prevent vibration from any unevenness of the floor, he brings the tip of the hammer to that point of the tendon he wishes

to be struck, and secures it opposite this position by tightening the screw at the sliding point; then bringing back the hammer-head, and fixing the upper end by the catch at the required angle on the arc and regulating at pleasure the amount of weight to be used, he presses the catch, the hammer falls, percusses the tendon at the required spot, the foot flies forward (if the jerk is present), and the extent to which it does so is recorded on the tape in the English and metric systems. And this is the knee-jerk amplitude.

The time-interval, the apparatus for which is not shown in the illustration, may also be estimated with a Marey's tambour fixed at a point of the arc where the bent upper end of the hammer comes into contact with the drum exactly at the time when the india-rubber tip touches the tendon firmly. This may be readily so adapted. Another tambour may be placed in contact with the end of the upper arm of a lever fixed, at a convenient level, to the upright of the limb-rest; the lower end of this lever must be arranged so as to be raised by the very slightest tension on a very light chain attached to the heel-strap on the foot, and, by means of an arrangement provided for the purpose, due care must be taken to keep the chain taut; the tambour tubes are led away to their respective needles, and register on a revolving cylinder the moment of impact and that of first movement of the foot. As the tubes are of equal length the loss of time is equal. A chronographic tracing, taken by means of a reed vibrating 100 per second, gives the time value of the interval. A third tambour from the thigh will give the time of the first appreciable contraction of the quadriceps, and thus valuable time-comparisons are obtainable.

By the courtesy of Dr. Ferrier and other members of the staff of the National Hospital for the Paralysed and Epileptic, a number of nervous cases have been examined in detail. Considerations of interest respecting the results of percussion of the various parts of the patellar tendon, and of utilising the various methods of reinforcement, have been made out, as well as some deductions affecting diagnosis and prognosis; but these are for the present reserved till further corroboration may have rendered them trustworthy.

# Progress of the Medical Sciences.

## MEDICINE.

In these days of therapeutic activity, when nearly every successive issue of every journal chronicles the advent of some new remedy, with a scientific name too unwieldy for ordinary use, and too often a value inversely as the length of its chemical formula, it is a novelty to note the reviving reputation of a long-known simple chemical element.

Oxygen is not now for the first time associated with medicine. The most important of all the elements was not likely to escape the notice of the inquiring scientific physician. A hundred years ago, and therefore soon after the discovery of oxygen by Priestley, Dr. Thomas Beddoes established in the Hotwells, at Bristol, a Pneumatic Institution, the superintendent of which was Mr. (afterwards Sir Humphry) Davy, who made in its laboratory many of his discoveries. Here observations were made upon the therapeutic value of many gases, including oxygen, and much was anticipated from the experiment. In the result, however, Beddoes showed himself "over-sanguine and speculative," and consequently his expectations were not realised. The institution gradually became an ordinary hospital, and in the course of ten years was relinquished by its founder, who is said to have pre-

viously branched off in various erratic directions, such as the domiciling of patients with cows and their insertion up to the neck in the excrement of these animals.

Later writers upon therapeutics have, as a rule, touched upon oxygen in a tentative manner suggestive of want of personal acquaintance with it. Scattered references to the gas are met with in medical literature, but it is only of late that its use has been prominently advocated.

Dr. Jacobi [1] speaks of oxygen in the treatment of "membranous croup," and quotes a case in which extension of the membrane took place below the tracheotomy opening, with resulting dyspnœa, cyanosis, and convulsions: whenever a current of the gas was introduced through the cannula, cyanosis and dyspnœa disappeared, to return when the supply was stopped. Delafield [2] recommends its inhalation in acute parenchymatous nephritis. Dr. W. G. Thompson [3] advocates the use of oxygen especially in the dyspnœa of chronic Bright's disease and uræmia, in pneumonia, chronic bronchitis, asthma, and catarrhal bronchitis. Dr. J. Chambers [4] says: "In pneumonic cases presenting symptoms of deficient blood-aëration, the inhalation of oxygen gas has in my hands proved to be a remedy of remarkable power. Under its use the lips recover their redness, the breathing becomes easy, and the toneless heart is strengthened in its action." He has given from half-a-gallon to a gallon of the gas every half-hour for as long as four days and nights with perfect safety, and is convinced that "life has certainly been saved in many cases where it has seemed that death was inevitable." If cardiac weakness is urgent, he also advises the administration of sulphate of strychnine, in doses of $\frac{1}{80}$ of a grain every four or six hours, until a decided change in the pulse is manifest, when the drug should be omitted, to be used again later if the heart tends to fail. Again, Dr. A. N. Blodgett [5] reports a remarkable case of pneumonia successfully treated by the continuous inhalation of oxygen. A lady was attacked with extensive pneumonia, with marked general symptoms. Excessive dyspnœa set in, against which all ordinary measures were useless, and oxygen was therefore administered, with very marked relief; but the dyspnœa returned again and again, though each time staved off by the inhalation, and at last the gas was given continuously. At one time the supply began to fail, and before fresh could

[1] Pepper's *System of Medicine*, 1885, vol. iii., p. 107.
[2] *Op. cit.*, vol. iv., p. 80. [3] *Med. Rec.* July 6, 1889.
[4] *Lancet*, 1890, vol. i., p. 1120.
[5] *Boston Med. & Surg. Journ.*, No. 21, 1890.

be obtained the patient was moribund; oxygen was therefore administered by artificial respiration, and the patient again rallied. The inhalation was then continued for 106 hours without intermission, and at the end of this time the breathing was healthy and natural; and recovery followed without further accident. On an average 200 gallons of oxygen were used in twenty-four hours. The author says that the effect was "almost as pronounced and evident as is that of ligature in hemorrhage."

Special prominence has since been given to this subject by Drs. Lauder Brunton and Prickett.[1] The gas was administered to a patient with double pneumonia, who when seen was "completely unconscious and apparently moribund, his face livid, the skin cold and covered with a clammy sweat, and loud mucous rattles accompanied every respiration." Fifteen ounces of blood were withdrawn by venesection, two doses of $\frac{1}{40}$ of a grain of strychnine were injected subcutaneously with an interval of twenty minutes, and oxygen gas was then administered. In two hours "an extraordinary transformation had taken place: the patient was perfectly conscious, his colour was quite healthy, and he expressed himself as feeling comfortable and well." The inhalation was then discontinued for some hours, when the pulse and respiration again began to fail; and in spite of the continued administration of oxygen, the patient died.

This communication has elicited the experience of other observers.

Mr. T. A. O. Langston[2] gave the gas to a patient with acute bronchitis, following influenza, who was completely insensible, with intense cyanosis, irregular respiration, and a very feeble failing pulse. In two hours the cyanosis was gone, but the patient was still quite insensible; in three hours she was perfectly conscious. When the inhalations were stopped for some hours, insensibility returned, to be again removed when the inhalations were renewed. A few hours later the supply of the gas ran out, and the patient died before more could be obtained. The effect of the oxygen was "simply marvellous," bringing the patient temporarily "out of the jaws of death to life." Dr. W. Carter[2] has for some years used the gas in respiratory troubles. He quotes an instance in which it undoubtedly saved the life of a woman with bronchitis and dilated right ventricle, who was blue and all but pulseless, and evidently about to die. The good effect of the oxygen was soon seen, and the following morning the patient was quite comfortable. Her recovery was uninter-

[1] *Brit. Med. Journ.*, Jan. 23, 1892. [2] *Brit. Med. Journ.*, Jan. 30, 1892.

rupted, and she was discharged from the hospital in due course. In Bright's disease, with threatened uræmia, Dr. Carter follows Jaccoud's plan of administering the gas mixed with air from a portable gasometer, which is wheeled to the patient's bedside. He points out that oxygen is excessively stimulating, and if inhaled suddenly in large amount may cause a tetanic condition of muscle; and also that its sudden expansion on its escape from the cylinder chills the air and the patient, and may cause irritation and cough. He uses an ivory (not glass) mouthpiece, through which the gas flows from the cylinder in a gentle stream that can just be felt on the back of the hand.

Dr. J. C. Thorowgood[1] quotes a case of advanced phthisis in which oxygen relieved oppression and dyspnœa, and caused the return of colour to the lips. The cylinder lay under the bed, and the patient now and again took an inhalation by means of a pipe with a stop-cock.

Dr. Aubrey Blakiston[2] gave the gas in three cases of pneumonia and one of acute bronchitis. All were unusually severe, and all recovered; and he believes that in two of these life was saved by its use. In two out of three cases of bronchial asthma the result was also very satisfactory. In a case of convalescence from acute illness, the patient said that after massage and the inhalation of oxygen he "felt as if he had been a six-mile walk and breathed sea-air."

Dr. A. W. Gilchrist[3] cites a case of influenza with lung complications, in which death was imminent from asphyxia and cardiac failure. Some improvement followed the injection of *two drachms* (!) of liquor strychniæ, repeated after two hours; but as collapse again threatened, strychnine was resumed "in larger doses," and oxygen was administered; with the result that the colour improved and the patient became more sensible and expressed herself as feeling relieved. On the fourth night she again became insensible, with cold extremities and dusky clammy surface. Fourteen leeches were applied, and oxygen was again inhaled: cyanosis was markedly relieved, the pulse improved, and complete consciousness returned. After some hours, however, death occurred, although the gas was still given "at intervals."

Dr. J. L. Porteus[4] of New York has frequently used a mixture of two parts of oxygen and one of nitrogen monoxide in pneumonia, phthisis, asthma, and uræmia. In the cyanosis of pneumonia wonderful effects were produced. In

[1] *Brit. Med. Journ.*, Jan. 30, 1892. [2] *Brit. Med. Journ.*, Feb. 13, 1892.
[3] *Brit. Med. Journ.*, Feb. 6, 1892. [4] *Brit. Med. Journ.*, Feb. 20, 1892.

one case a minute's inhalation reduced the respirations from 50 to 25 per minute, and gave great relief. He advocates its use in the *early stages* of pneumonia. Inhaled for a minute or two every half-hour till the patient is relieved, and then every three or four hours, it lessens the frequency of the respirations, slows the heart's action, subdues restlessness, and induces sleep. In asthma its administration two or three times a day gives excellent results.

My own experience [1] accords with that of the foregoing observers. A patient, aged 66, the subject of marked emphysema and secondary dilatation of heart, was attacked with extensive bronchitis and broncho-pneumonia. When the inhalation of oxygen was begun the pulse was rapidly failing, the surface was very dusky, and the end was fast approaching. The immediate effect was most striking: the pulse improved wonderfully in tone, and the cyanosis completely disappeared. When the inhalations had ceased for a few minutes, however, the pulse again began to fail and the cyanosis to return, to be again removed by the fresh administration of the gas. In about ten hours' time the effect of the inhalations began to be less marked, and the patient gradually sank and died. The influence of the oxygen in temporarily removing cyanosis and stimulating the failing heart was extraordinary, and altogether beyond doubt; and although a fatal issue was not averted, yet it was manifest that life had been prolonged for some hours.

In most of the recent cases the gas has been obtained from Brin's Oxygen Company, 34 Victoria Street, Westminster, whose Bristol agent is Mr. C. H. James, of 30 Broad Street. This company also supplies a simple inhaling apparatus, which is preferable to the tube leading directly from the cylinder to the patient's mouth.

All the observers agree in describing the wonderful influence of oxygen in removing cyanosis and stimulating the heart; but the ultimate result has too often been unfavourable. It is evident, however, that the gas has been given only as a last resource, and when the patient has been even *in articulo mortis;* and its extraordinary temporary power under such disadvantageous circumstances gives ground for hope that, if intelligently handled, it may prove a therapeutic agent of great value. The theory of its administration is sound; increased power of oxidation in the inhaled atmosphere should compensate for diminished oxidising surface. As oxygen forms about one-fifth of atmospheric air, an atmosphere consisting solely of the gas should suffice for the

[1] *Brit. Med. Journ.*, Feb. 6, 1892.

oxidation of the blood if only one-fifth of the normal respiratory area were available. The mathematical accuracy of this calculation it would be difficult to demonstrate; but that it cannot be very wide of the truth, such results as those described by Dr. Lauder Brunton go far to prove.

In conclusion, it may be said that the following are the lessons to be drawn from our present experience of the use of oxygen in acute respiratory troubles:

1. That its administration should not be too long deferred.
2. That in extreme cases it should be given continuously and persistently.

E. MARKHAM SKERRITT.

## SURGERY.

Dr. F. N. Otis of New York contributes a paper on "Reflex Irritations and Neuroses caused by Stricture of the Urethra in the Female."[1] The symptoms he describes are such as are frequently observed and described under the head of "irritability of the bladder," and which, when occurring in women, are generally ascribed to abnormal conditions of the urine, uterine or pelvic troubles, or hysteria (all of which can undoubtedly produce the symptoms), but never to what Dr. Otis maintains is a very frequent cause; viz., stricture of the urethra. This condition receives the scantiest notice (if any) in most of the recognised surgical works, and the conclusions arrived at in this paper, if corroborated, will deserve the most careful attention. Two points may be brought into prominence from the observations and cases here published: (1) that the strictures met with are of the "large calibre" kind, and are yet capable of causing the severest reflex symptoms; and (2) that the stricture may be situated at any part of the canal. Dr. Otis finds, from a limited number of exact observations, that the normal calibre of the female urethra varies from 30 to 45 mm. in circumference ($\frac{2}{5}$ to $\frac{3}{5}$ inch in diameter), and that it is of nearly uniform size throughout its length, with the exception of an occasional very slight contraction at the meatus. To determine the existence of any narrowing, the urethrometer or bulbous sounds may be used. In using the former, it should when closed be passed well into the bladder, then fully expanded and withdrawn till it hitches against the "internal meatus." The bulb is then turned down till it will pass through the neck of the bladder, giving the proper calibre of the urethra;

[1] *Med. Rec.*, Jan. 9, 1892.

and as the instrument is gradually drawn out, any lessening of this will be readily detected and accurately gauged. In three cases quoted in the paper, the contraction varied from 8 to 12 mm., and the site from within half an inch of the neck of the bladder to the external meatus.

Divulsion or gradual dilatation may be employed in the treatment of these cases. The former is much less risky in the case of the female than of the male urethra; and Dr. Otis has in several cases carried the distension up to 70 mm.; but he considers gradual dilatation up to the normal calibre the most judicious treatment as a general rule. The tendency to recontraction of the stricture seems to be very great, but the occasional passage of an instrument will keep up the good effect, and this many patients can learn to do for themselves.

In reference to the causation of these strictures, Dr. Otis insists that they can arise, quite independently of any venereal origin or noticeable urethritis, from the passage of irritating urine in lithiasis. This he maintains is true in both sexes.

Van de Warker [1] supports Dr. Otis's opinion as to the frequency of stricture in women, and advises gradual dilatation.

* * * *

Dr. A. T. Cabot of Boston supplies a valuable paper [2] on the subject of the surgical treatment of a calculus impacted in the ureter, based on a consideration of the anatomy of the tube and on experimental dissections. He starts with the assumption that extraperitoneal ureterotomy is the operation of choice, as the ureter is so thin-walled that its safe closure intraperitoneally is very uncertain. The anatomical relations on which most stress is laid are:

1st. That the ureter is adherent to the overlying peritoneum, so that it is separated with it when the latter is stripped up.

2nd. That its position with regard to the line of firm adherence of the peritoneum to the spine is very constant, being just outside it, but a little further out on the right side owing to the interposition of the vena cava, with which it is in close apposition.

3rd. That the converging lines of the ureters through the pelvis lie pretty closely over the lateral edges of the sacrum.

4th. That, in the female, the ureter for the last two, or sometimes three, inches runs in the broad ligament in close relation to the upper part of the vault of the vagina.

[1] *Journ. Amer. Med. Assoc.*, Oct. 4, 1890.
[2] *Amer. Journ. Med. Sci.*, Jan., 1892.

On this basis he proceeds to formulate various operative measures for exposing the ureter in any part of its course. In its abdominal course he adopts the incision planned by Israel—a line drawn from the outer edge of the erector spinæ, a finger's-breadth below the last rib, parallel with it to its tip, then turning downwards and inwards to a point about two inches above and internal to the anterior superior iliac spine, whence it is continued in a curved direction to a point about an inch above and external to the middle of Poupart's ligament, and then inwards to the external border of the rectus muscle. According to the position of the calculus, the incision is to be made in the posterior, middle, or anterior third of this line. This excludes the pelvic part of the ureter —the last three or four inches—in adults at any rate, the part, unfortunately, where calculi most often lodge. Sometimes the stone projects through the mouth of the ureter into the bladder, or lies in the vesical part of the ureter merely covered by vesical mucous membrane. In either of these cases it may be removed through the bladder; but if it be impacted just outside the bladder, the danger of urinary infiltration is too great to allow of its removal in this way. For such cases Dr. Cabot has devised the following operation: An incision is made along the border of the sacrum, stopping just below the point of the coccyx, the sacro-iliac ligaments are divided, and the coccyx and lower part of that side of the sacrum are removed. This gives free access to the ureter, and its relation to the edge of the sacrum will serve as a guide to its position, although the presence of a stone will probably remove all difficulty on this head. The peritoneum is very thin, and so would be very liable to be torn if the search were protracted. The rectum had better be defined by introducing a large sound, which can at the same time be used to draw it to one side.

In the female this part of the ureter can be reached by a much less formidable operation. An incision made outwards and backwards through the upper part of the vault of the vagina will reach it between the layers of the broad ligament. The finger is pushed up into the ligament separating the tissues, till the stone is reached. Dr. Cabot relates a case in which he successfully practised this method. The stone, which was felt as a hard, very sensitive, mass close to the cervix, was easily reached by the vaginal incision. Its extraction was not so easily accomplished, as the presenting end of the calculus broke off in the forceps, and the remaining portion had to be dislodged by a blunt hook passed into the ureter above it. She made a good recovery, with the exception of

a small fistulous opening, which persisted when the patient was last heard of, four months after the operation. No urine came through the fistula, showing that the corresponding kidney had been completely destroyed.

Dr. Cabot next discusses the question of localisation when the symptoms of calculous impaction are present. A stone impacted in the lower few inches of the ureter can generally be felt by a rectal or vaginal examination; but in the higher part of its course palpation is very difficult and uncertain. A spot of constant tenderness in the line of the ureter has sometimes indicated the place of impaction. But if, as must often happen, no indications are present to locate the stone, an exploratory abdominal incision should be made, and the whole length of the ureter examined. Dr. Cabot refers to two cases where this was done by Hall[1] and Arbuthnot Lane[2] with most satisfactory results: the calculus was easily found, and then removed extraperitoneally by another incision in the lumbar region. Lane's case is especially instructive, inasmuch as the pelvis of the kidney and the upper part of the ureter had been previously explored through a lumbar incision, and the lower part through the rectum and vagina, and at the subsequent abdominal exploration the stone was found in that part of the ureter which could not be reached from the lumbar wound or from below. The calculus was manipulated upwards to the crest of the ilium where, it could be easily reached from the loin—a manœuvre worth bearing in mind. Mr. Lane closed the ureteral incision successfully with silk sutures; but Dr. Cabot objects to this method, that it is very difficult to carry out securely without allowing any of the sutures to pierce the mucous membrane, in which case they might serve as nuclei for fresh calculous formation.

The incision seems to heal readily and soundly when left alone.

* * * *

Iodoform has long enjoyed a reputation in the treatment of tubercular lesions, and its utility is the subject of an elaborate paper by Dr. Senn in the *Annals of Surgery*.[3] After summarising the experiments of numerous observers in this direction with various antiseptic substances, he discusses the results of laboratory and clinical experience in the case of iodoform. Experiments by Troje and Tangl are referred to as showing that iodoform dusted over culture media markedly diminishes the virulence of tubercle bacilli; and others by

[1] *Med. Rec.*, Oct. 18, 1890. [2] *Lancet*, Nov. 8, 1890.
[3] Jan., 1892: "Treatment of Tuberculosis of Bones and Joints by Parenchymatous and Intra-articular Injections."

Gosselin on rabbits and guinea-pigs, in which the prolonged use of iodoform injections seemed undoubtedly to retard, and in some cases altogether prevent, the extension of previously inoculated tuberculosis.

The clinical experience in its favour is however the one to which Dr. Senn appeals as the most uniform as well as convincing, and he quotes the testimony of Billroth, Krause, Bruns, Trendelenburg, and many more in its favour. The method advocated is that of injecting iodoform, held in suspension, either interstitially into solid tubercular foci, or into the cavity of a tubercular joint or abscess. The injection can be made either through a cannula or by means of an ordinary injecting syringe, the puncture being sealed with a piece of aseptic wool soaked in iodoform collodium. The precautions that require emphasising are:

1st. A most careful disinfection of the skin and injecting instrument.

2nd. The use always of a freshly-prepared and sterilised emulsion of iodoform in glycerine or olive oil (10 per cent.).

3rd. A sufficient interval between the injections.

The initial dose varies according to the age, and the size of the tubercular focus; but 3 to 8 drachms is an average dose. This should not be repeated oftener than every eight or fourteen days. Employed in this way, the injections are followed by no dangerous complications. An ethereal solution must be avoided, as gangrene of the overlying tissues and iodoform intoxication have frequently followed its use. In the case of tubercular joints containing fluid, this should be first withdrawn through a cannula and the joint irrigated with a 3—5 per cent. solution of boracic acid till it returns quite clear, and then injected, taking special care to exclude air. If the fluid is too thick to run through a large cannula, the joint should be freely incised, scraped, and rubbed out with iodoform gauze, the wound sutured, and the injection then proceeded with as before. The same rules apply to abscesses. If, on the other hand, the joint contains no fluid, besides throwing the emulsion into the joint-cavity, the thickened synovial (and, if necessary, osseous) tissue should be injected; and it is best to deposit the iodoform in several places, which can be done by pushing the needle in different directions without removing it completely. The injection should be made at different points at each repetition of the process. Uniform diffusion of the injected fluid can be secured by kneading the parts, and by passive movements of joints. Dr. Senn does not consider immobilisation of the affected joint necessary during this treatment, unless active

movements are very painful. He makes an exception in the case of spinal caries and severe hip-disease; but general surgical experience would suggest its co-operation in all cases.

Bruns and Nauwerk have excised and examined pieces of tubercular tissue at various periods after the injection of iodoform, and as a result of their examination they find that the bacilli disappear, the miliary tubercles become softened by infiltration with round cells and serous fluid, and later that the tubercles disappear by fatty degeneration and liquefaction. Concurrently with these changes a process of repair goes on in the adjacent tissues, forming a line of demarcation in the shape of a wall of healthy granulation tissue, which partly consumes and partly casts off the degenerated tubercular tissue. This being its mode of action, it cannot reasonably be expected to effect a cure where the primary focus contains large masses of cheesy material or a large sequestrum, which must be removed before repair can take place; but the injections do no harm, if they do not actually improve the conditions for surgical measures as Dr. Senn believes.

The paper concludes with a brief report of ten cases treated by the author since April, 1891, with seven good results. In no case were any bad effects produced by the injections. These were always followed by some swelling for a day or two, which afterwards subsided. Improvement was announced by a change in the character of the effusion—the solid portions disappearing, and the fluid becoming viscid and mucus-like shortly before it finally ceased.

W. M. Barclay.

## OPHTHALMOLOGY.

A valuable paper by J. B. Lawford and Treacher Collins appears in the Royal London Ophthalmic Hospital *Reports*, December, 1891. The authors tabulate 103 cases of undoubted sarcoma of the uveal tract, their main object being to obtain evidence on the question of prognosis in this affection. In 95 cases, simple enucleation was performed; in 16, secondary or more radical operations. Of the total number of cases, 79 have been traced—half of these were dead. Of those living—in one-half, three or more years have elapsed since the enucleation was performed; in the other half, the operation was less than three years ago, so that a permanent recovery of one-quarter of the whole number may be assumed. Of those which are known to be dead, one-half died during the first two years after the operation, and three-fourths during

the first four years. No pains were spared in seeking for the real cause of death: besides help from several medical men, the death register at Somerset House was consulted in many cases. In at least one-third of the cases traced, death was due to metastatic growth, very frequently in the liver; and in another group the cause of death was assumedly metastasis, although the death returns are not definite upon this point.

Dr. Hill Griffith [1] found that in 23 cases of enucleation for choroidal sarcoma, fourteen (60 per cent.) were well at periods varying from three to ten years; six died of sarcoma of the liver; the other three died, but less certainly from extension of the disease. Local recurrence in the orbit took place in two. He is of opinion that metastasis is not more probable where enucleation has been postponed to a late stage of the eye disease, than where early removal of the eye has been practised. He referred to several cases which had remained well years after enucleation, even though this was done after the growth had become extra-ocular, and in one case, where the tumour had existed as long as seventeen years. Most surgeons would, however, consider it of extreme importance to remove the eye at the earliest possible period after the diagnosis has been made; but Fuchs also found that metastasis was as likely to occur if the operation is performed early as late in the eye disease, while the earlier it is done the less probable is local recurrence. Statistics indicate that local recurrence after operation occurs in from 10 to 25 per cent. of the cases; and in a large majority of these, within about six months of the enucleation.

Sarcoma of the iris must be very rare. Lawford and Collins only mention, in their list, one case. Martin [2] mentions one out of 43 cases; but Fuchs[3] gives 16 out of 259 cases. The choroid behind the ciliary body is almost always the site of these tumours. The ciliary body according to the three authors quoted was the primary seat of the new growth in 6 out of 103, 22 out of 259, and 4 out of 43 cases, respectively. The record of Fuchs, that of 22 cases under his own observation at least 11 died of metastatic growths, *i.e.* one-half, may in all probability be nearer the real average than the 18½ per cent. deaths by metastasis deduced by that author, from his collected list of 259 cases.

Hirschberg,[4] in 1882, gave details of 13 cases of enucleation for choroidal sarcoma. In five cases less than two years had elapsed since the enucleation—not sufficient time for draw-

[1] *Ophth. Rev.*, 1891, p. 353. [2] *Prognostik der Uveal Sarcom.* Halle, 1885.
[3] *Das Sarcom des Uvealtractus.* Wien, 1882. [4] *Arch. f. path. Anat.*

ing conclusions. Of the other eight, six had died; one from local recurrence six years after operation, five from metastatic formations, without local recurrence, and all five within two years of the removal of the eyeball. Metastasis probably very seldom occurs later than five years from the affection of the eye; yet Lawford and Collins show that in several cases this fatal complication has attacked the patient at a much later period.

In Lawford and Collins's 103 cases of sarcoma of the uveal tract, 27 occurred between the ages of 40 and 50; 84 cases, between 30 and 70 years; 10 cases before 30, the youngest of all being 15 years old; and 9 cases after 70.

Sarcoma of the uveal tract, is probably about twice as common as glioma of the retina—the latter is usually found in infants. Indeed, Hirschberg believes it is always *ab initio* congenital—it is exceedingly rare at so late an age as fifteen years. Sarcoma in both eyes is, probably, much more rare than binocular glioma.

Mitvalsky[1] (Prague) writes on metastatic carcinoma of the eyeball. He mentions altogether 11 cases. The seat of the primary neoplasm in all save one was in the mammary gland, and one of these patients was a male, in the remaining case the primary growth appeared in the pleura. The ocular metastases were always in the choroid, the first development probably occuring within the lumen of the smaller vessels in the choriocapillaries. Histologically the metastatic growth corresponded in type with the primary one. In at least four of the cases, both eyes were affected; one shortly after the other. The time that elapses between the primary and secondary growths is quite uncertain; but, as in other organs of the body, the metastasis is an indication of the approaching death of the patient.

Dr. Elschning[2] now reports a carcinoma of the choroid which appeared about nine months after removal of the breast and axillary glands. The earlier symptoms resembled detachment of the retina, which continued to increase; then came increased tension of the eyeball, and afterwards severe glaucoma. The autopsy showed carcinomatous tumours in the brain, lungs, and liver. From careful microscopical examinations of his own case and a study of others, Elschning considers that the metastases are caused by carcinomatous emboli in the choroidal vessels; the epithelial masses develop at the point of invasion within the blood-vessels, they spread first within the vessels, then break through the wall and spread atypically, and cause hyperplastic tissue changes

[1] *Arch. Ophth.*, vol. xx., 2. [2] *Arch. Ophth.*, vol. xx., 3.

in the stroma of the choroid. Usually the tumour within the eyeball is flat, slowly growing, and not easily recognised either by the ophthalmoscope or by its effect on the vision of the patient until the retina becomes detached. In two or three cases on the other hand, the growth has been elevated, and vision has been more rapidly destroyed. Elschning then goes on to consider metastatic sarcoma of the choroid, which he thinks, may be in reality rather more common than authors believe. He says some cases can be best explained by considering the tumour in the eye as a metastatic manifestation of a general sarcomatous infection, whose starting point is to be sought for outside the eye. Though it may no longer be held that melanotic sarcoma is found primarily *only* in the uveal tract, and that thus it is just possible that a melanotic growth found in the choroid may be secondary to one existing elsewhere; still, it is certain that clinically sarcoma of the choroid as a secondary growth must be very rare. A few cases have been quoted by Brömser [1] and by Pflüger.[2]

Gayet [3] has described an adenoma of the choroid secondary to adeno-carcinoma of the stomach.

The differential diagnosis between subretinal tumour and simple retinal detachment, often presents considerable difficulty. The method suggested by Lange of intra-ocular examination through the dilated pupil, with help of strong oblique illumination upon the outer surface of the eyeball through sclera and conjunctiva, shows not only clearly the detached retina, but to a certain extent the kind of substance that lies beneath it.

* * * *

In acromegaly the pituitary gland has been often found to be hypertrophied, and Dr. Marie [4] considers this one of the essential elements in the pathology of the disease.[5] In a very careful examination of the skeleton in one of these cases, Dr. Alexis Thomson [6] drew attention to the very deeply distended pituitary fossa, due to pressure of the hypertrophied pituitary body.

M. Pinel Maisonneuve [7] has recently called attention to the eyes in a typical case of acromegaly, the symptoms of which might all have been due to compression of the optic

[1] *Arch. f. Ophth.*, vol. xxxi. [2] *Arch. f. Augenh.*, vol. xiv.
[3] *Arch. d'ophth.*, May, 1889. [4] *Rev. de med.*, April, 1886.
[5] *Acromegaly*. Syd. Soc. ed., 1891, p. 61.
[6] *J. Anat. & Physiol.*, 1890. [7] *Progrès méd.*, May, 1891.

chiasma and optic tracts and the back of the orbits by an enlarged pituitary body. There were present exophthalmos, imperfect movement of the eyeballs with want of association between the eye and the lid movements, sluggish pupillary action to light, and congestion of the retinal veins.

Optic atrophy and hemianopsia without interference with the globe or its movements, in a patient with acromegaly, were quoted by Meyer; and Dr. Ruttle,[1] in reporting a case, says: "At the time of the severe explosion, her extremities rapidly enlarged, so much so that her left ring-finger burst her wedding-ring, a moderately stout one. She also began to experience failure of sight at this time, which has gone on to total blindness in the right eye from atrophy of the optic nerve. In the left eye the temporal half of the field of vision is gone, and the activity of the upper limit at the nasal side is slightly enroached on; the hemianopsia is very clearly defined . . . the pupils are always somewhat dilated, the optic axes are divergent." In Saundby's case, no brain tumour could be found, and in one reported by Waldo[2] the pituitary body was healthy; cavities were found on both sides of the cerebrum and of the cerebellum, but no abnormal symptoms or appearances could be detected in connection with the eyes.

Dr. Hadden's case,[3] one of the first published, had optic nerve atrophy of the right eye, with very tortuous veins.

* * * *

Dr. König[4] draws attention to the excessive secretion from the conjunctiva and from the lacrymal glands which occurs in some cases of locomotor ataxy. He and Féré, who has also noticed a similar condition, suggest the term Lacryorrhœa to express this hypersecretion, which seems to depend on nervous influence, either paralysis of the cervical sympathetic, or irritation of the trigeminus. In one of König's cases the amount of the secretion varied according to the lightning pains, increasing with them in intensity and the converse; the same case presented marked paralysis of both third nerves.

* * * *

Dufour[5] quotes three cases from Landolt's clinic of bilateral paralysis of the sixth nerves. In two of them the pupils were small, and reacted to accommodation much more freely than to light. Prior temporary attacks of diplopia had been

[1] *Brit. Med. Journ.*, 1891., vol. i., p. 697. [2] *Brit. Med. Journ.*, March, 1890.
[3] *Brit. Med. Journ.* 1888, vol. i., p. 855. [4] *Progrès méd.*, Oct., 1891.
[5] *Progrès méd.*, Sept., 1891.

present in two of the cases. The patients found difficulty in standing with their eyes closed, and one had total absence of knee-jerk. None of them were distinctly ataxic, but the symptoms seemed to be obviously due to chronic cerebro-spinal mischief, probably an early stage of locomotor ataxy. Macinlay, Doyne and Donaldson, in *Transactions of Ophthalmological Society*, have reported cases of bilateral paresis of the external rectus, but none of these showed any association with locomotor ataxy, and I have recently had a case in which neither eye could be everted beyond the middle line. The patient, a healthy young woman of 25, had recently suffered from "La Grippe." The defect of the eyes was noticed during the illness, a week after its commencement; there was no other defect of muscle power or reflex, either ocular or general. The right eye was the first affected, and is improving; the left external rectus is also gaining slowly in power. The prognosis in this case seems to be absolutely favourable.

* * * *

Dr. Ferguson [1] recommends strophanthus in the treatment of exophthalmic goitre, from an experience of its use extending over eight cases, in which he has found it more beneficial than any other drug or remedial measure. He gives a dose of the tincture at each meal, commencing with 8 drops and increasing it up to 15 or 25 drops.

* * * *

Trousseau [2] reports highly of the treatment of chronic types of conjunctivitis by petroleum, which produces less reaction than copper sulphate or silver nitrate. The application is not painful, and the drug is well borne by the inflamed cornea. "Brossage" with a hard tooth-brush was strongly recommended by Osio and others at the recent Spanish Medical Congress, for chronic granulations of the conjunctiva, and such a method might be used in order to rub the petroleum well into the tissues.

* * * *

Stevens suggests, for the detection of heterophoria, a metal or rubber disk the size of the ordinary trial lens in which a central hole of 3 mm. contains a strong lens about +13D. Such a lens converts the image of a candle flame into a disk of light, the position of which compared with that of the candle flame as seen normally with the second eye, indicates the direction of the faulty tendency. E. B. Myrowitz, 295 Fourth Avenue, New York, makes the disk.

* * * *

[1] *Am. J. Ophth.* [2] *Centralbl. f. d. ges. Therap.*, Oct., 1891.

C. S. Bull [1] reports five cases of treatment of detached retina by Schöler's method, injection of three drops of tincture of iodine into the vitreous; no good effect occurred in any of the cases, and in more than one severe intraocular inflammation resulted, although the injection was very carefully done and with strict antisepsis.

* * * *

For immature cataract Fulton [2] advocates extraction without iridectomy, and irrigation of the capsule with tepid 2 per cent. solution of boracic acid, just as soon as the patient is unable to follow his avocation; he leaves bandages off the eye as early as possible, the second or third day. In his opinion, any of the methods suggested for artificial maturation are attended by danger, and are only rarely successful.

F. R. Cross.

## OTOLOGY.

*The Annals of Ophthalmology and Otology* is the title of a new quarterly journal edited by Dr. James P. Parker, and published in Kansas city. The first number, dated January, 1892, contains 74 octavo pages, devoted mostly to original communications. The *Journal of Laryngology and Rhinology* is now called the *Journal of Laryngology, Rhinology, and Otology*, Dr. Dundas Grant being the editor. In addition to these, there is the American *Archives of Otology;* so that the English-speaking race need not remain long in the dark with reference to modern progress in otology.

* * * *

Dr. Polo of Nantes records a case [3] of trephining the cranium for cerebral abscess following ear disease, which was, to a certain extent, successful, although the patient did not recover.

The patient was a boy aged six, who developed an acute inflammation of the middle ear while convalescing from measles. This was accompanied by great pains in the affected (left) side of the head, not relieved when purulent discharge from the meatus succeeded. When seen by Dr. Polo (a week after the illness commenced) the patient was pale, with slow pulse, responding slightly to questions, and taking little notice of his surroundings. He slept badly, vomited at intervals, passed his urine into the bed, and constantly complained of the left side of his head, where he

[1] *Med. Rec.*, Jan. 16, 1892. [2] *Am. J. Ophth.*, 1891, p. 165.
[3] *Revue de Laryngologie, d'Otologie et de Rhinologie*, Jan. 15, 1892.

frequently placed his hand. There was internal strabismus of left eye. A perforation was seen in the postero-inferior segment of the left drum-membrane, and the meatus contained pus. The mastoid process was well developed, but neither red nor swollen. Pain was produced by pressure in the mastoid region or above the ear. Pressure became less painful towards the left temple. There was no paralysis of the limbs, and sensation was everywhere perfect.

It was evidently meningitis or a cerebral abscess. The slight rise of temperature, the localisation of the pain, as well as the larger proportion of cases of brain abscess, made Dr. Polo incline to the latter hypothesis; but he decided at first to trephine the mastoid antrum. Nothing was found here, and no relief was afforded; so the next morning he trephined the cranium over the temporo-sphenoidal lobe. A crucial incision was made $4\frac{1}{2}$ centimètres above the auditory meatus, and a large trephine applied. The brain bulged strongly into the trephine hole, and the dura mater having been cut across, the cannula of an aspirator was thrust in, to the depth of three centimètres. Nothing having escaped, a second thrust was made in a backward direction, also without result. At last the instrument was thrust perpendicularly inwards to a depth of four centimètres, with an immediate escape of two teaspoonfuls of moderately thick yellow pus. The aspirator was then applied to the cannula, and some thin clear fluid came away, which resembled cerebro-spinal fluid, evidently coming from the lateral ventricle. An incision was then made by the side of the cannula, and a drainage-tube inserted. Very little amelioration of the symptoms resulted, and the patient died the next day.

* * * *

Dr. J. Ward Cousins has been exercising his inventive genius again, and has lately described and figured [1] an aural speculum and head rest for facilitating the examination of the auditory meatus and drum membrane. The head-rest consists of a strong wooden stem, with a handle fixed near the upper end for the patient to hold, and a support for the head, well padded and covered with leather. The peculiarity of the speculum is, that it has a mirror and lens attached to it. In examining the ear the position of the mirror is regulated so that the pencil of light falls upon the bottom of the meatus, and this is then looked at through the lens. I have no doubt that, in the hands of Dr. Ward Cousins or any other surgeon who habitually used it, this instrument

[1] *Lancet*, Jan. 16, 1892.

would afford a good view of the parts looked at; but all such complicated apparatus should be avoided as far as possible, especially in teaching, and a plain forehead mirror and a conical speculum are quite sufficient for all practical purposes.

* * * *

It is now generally accepted that the auditory centre lies in the first or in the two upper temporal convolutions; but Dr. Charles K. Mills, neurologist to the Philadelphia Hospital, records a case [1] which seems to show that this centre, as well as that of speech, lies in the left half of the brain.

The patient, a woman aged 31, right-handed, had an apoplectic attack, which left her word-deaf but not paralysed. Prior to this attack her hearing had been good; but after it she could not, by hearing, understand anything that was said to her, although she could hear some other loud sounds. Six years afterwards she had another and more severe apoplexy, after which her deafness increased for sounds as well as words, until it was almost total. This seizure left her also with partial left hemiplegia, chiefly affecting the arm. She died nine years after the second attack. At the *post mortem* examination the first temporal convolution of the left hemisphere was remarkably small, narrow, and smooth, except at its anterior extremity. Its posterior two-thirds or three-fourths were shrunken to a thin strip. At a point about the middle of the gyrus, the convolution had so disappeared as to leave only a notch and shred of tissue. At a position corresponding to the posterior fourth of the second temporal convolution and the parallel fissure, the brain presented a marked depression or cavity, at the bottom of which, when the specimen was in the fresh state, was a small mass of yellow, shrivelled, puckered tissue, evidently the remains of an old embolic softening. In the *right* hemisphere was an old and very extensive hemorrhagic cyst which completely destroyed the first, and almost completely the second, temporal gyrus, as well as the island of Reil and part of the ganglia and capsules.

From a study of this case Dr. Mills concludes that the centre for word-hearing is situated in the hinder thirds of the first and second temporal convolutions, just in front of the posterior extremity of the fissure of Sylvius; also that the auditory centres have their highest development in the left hemisphere; but destruction of the auditory areas of the two upper temporal convolutions of both hemispheres is necessary to complete brain deafness.

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[1] *Brain*, Winter Number, 1891.

Mr. Arbuthnot Lane calls attention [1] to the great importance of examining the mastoid antrum in certain cases of chronic purulent otitis media. In many of these the foul and caseating inflammatory products collect in the antrum, and produce much irritation by their presence, in consequence of which the size of the cavity is increased by the absorption of its bony walls. Finding this condition to be a great obstacle to cure by simple means, he proceeds to cure the disease by gouging away the whole of the mastoid process and subjacent antrum, allowing the cavity to granulate up from the bottom. At the same time, the opening between the antrum and the tympanum is enlarged, so as to freely drain the tympanum through the aperture, and allow currents of antiseptic fluid to be syringed through. A very successful case is described and reference made to other cases of the same kind lately published by the same surgeon. [2]

W. H. HARSANT.

## Reviews of Books.

*A Manual of Operative Surgery.* By FREDERICK TREVES, F.R.C.S. Two Vols. Pp. 775 and 775. London: Cassell & Co. 1891.

We have already, in reviewing a work in these pages, expressed an opinion that no single man could write, unaided and from his own experience, a completely satisfactory work on Operative Surgery. If anything could make us modify the opinion then expressed, the work before us would do so. The author has brought to bear on his task indefatigable industry, accurate anatomical knowledge, varied practical experience, and a clear and often picturesque style; and he has given us a work of which he and the hospital to which he belongs may well be proud.

Looking into the details of the work, we have formed the most favourable opinion of the excellence, from the literary as well as practical standpoint, of Part I., dealing with general principles. Chapter II., on the operator, is a model of crisp and polished literary work, and is also brimful of clear, sound sense. No surgeon can read it without being the better for it. Part II., on the administration of anæsthetics, is written

[1] *Guy's Hospital Gazette*, Feb. 6, 1892. [2] *Lancet*, Sept. 26, 1891.

by Dr. Hewitt, and is a sound and sufficiently full piece of work. Of the rest of Vol. I., dealing with the ligature of arteries, operations on nerves, amputations, operations on the bones and joints, and tenotomy, we must speak in terms of high praise. On these subjects Mr. Treves is evidently at home; he writes with the double authority of full anatomical knowledge and extensive personal experience. The chapters on amputations are particularly good.

The second volume, although in some parts of special excellence, is here and there open to criticism. Naturally, the least satisfactory portions are those where personal experience is least. Thus in plastic surgery, a part well handled as a whole, the operation for ruptured perineum would scarcely satisfy the best surgery of the present day. If Mr. Treves had been able to bring his cultured surgical experience to bear on methods other than that described in Galabin's work, we are convinced that, in comparison with them, it would have been rejected. Part IX., on operations on the neck, is particularly good. On the subject of the tongue our author, in that operation in which he has had a most conspicuous success, is most modest. Preliminary ligature of the lingual arteries, a proceeding rather to be fought shy of by most surgeons, is, in Mr. Treves' hands, a mere anatomico-surgical exercise, or casual preliminary to the major or proper operation. For the majority of us it would be regarded as the most difficult part of the operation. Part IX., on abdominal operations, is, in many respects, excellent; in some, as in the important subject of intestinal obstruction, it is authoritative. We are glad to see that Mr. Treves has come to believe in enterotomy as a remedial measure of value in certain cases of obstruction. On the subject of hysterectomy for fibroids, in which it is evident our author has not had much experience, we cannot speak so favourably. Here he lets his zeal somewhat outrun his discretion. His love for the intra-peritoneal treatment of the pedicle—a love which all good surgeons share with him—leads him into a wholesale condemnation of the extra-peritoneal methods. No doubt we shall some day come to adopt intra-peritoneal treatment of the pedicle entirely; but so long as this method shows a mortality nearly double that of the extra-peritoneal, cautious surgeons will reserve the right to select their methods.

Operations on the intestines are most admirably described. We should have liked to have seen a description of Reclus' simple and excellent method of performing colotomy, an operation which has found much favour in the provinces, and which probably, in harmony with the history of other surgical

improvements, will soon become known and appreciated in the metropolis.

Curiously enough, one page, and one page only, is devoted to the surgery of the eye; and that is, the destructive operation of excision of the eyeball. Might not a curious commentator on specialism here find a theme in the practice of the London Hospital?

We lay down the volumes fully confirmed in the belief that here we have one of the best single works on operative surgery ever written. If, here and there, we feel that we are in opposion to the author, we are conscious that the choice is between the better of two goods, rather than between good and bad. And, always, we know we shall return to these volumes for good advice and clear description in the difficult and trying art which it is our lot to cultivate.

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*Materia Medica and Therapeutics, with especial reference to the Clinical application of Drugs.* By JOHN V. SHOEMAKER, A.M., M.D. Vol. II. of a Treatise on Materia Medica, Pharmacology, and Therapeutics. Being an Independent Volume upon Drugs. Pp. xxi., 355—1004. Philadelphia: F. A. Davis. 1891.

This, the second volume of the work by Prof. Shoemaker, has appeared at a considerable interval after the first part, and in its preparation Dr. Aulde seems to have had no share, as he had in the former. The substances are arranged in alphabetical order, thus facilitating the process of finding the information afforded about any particular remedy; in the existing state of therapeutics this is the only sensible method to follow. The work deals comparatively slightly with the chemistry or even pharmacology of drugs, but treats of their therapeutical application with convenient fulness; very many useful formulæ and practical hints in the employment of remedies are given in the text, and will be of much use to practitioners. The delay in publishing the volume has enabled Prof. Shoemaker to bring the matter well up to date, so that there can be found full information upon such new remedial agents as tuberculin, spermine, exalgine, pyoktanin, and so forth. Besides these and such like, there receive description many substances practically unknown to us in England, such as hoang-nan, squaw-vine and Mormon tea. Taking the first and second volumes together, the book is

undoubtedly the most far-reaching of works on therapeutics in the English language; from the point of view of physiology it is not in comparison with Lauder Brunton's book, and perhaps some others, but as a dictionary of remedies and their uses it is as yet the most complete. The index-maker has also done excellent work.

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*Colour Test Chart.* By JOHN BROWN, M.D. London: Burroughs, Wellcome & Co.

This test for colour-blindness is based upon the theory of Edridge Green, and will be found of use in examination of the colour-perception. But where a question as to defect in colour-vision becomes important, most experts would prefer Holmgren's wools.

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*Handbook of Diseases of the Ear.* By URBAN PRITCHARD, M.D. (Edin.), F.R.C.S. (Eng.). Second Edition. Pp. xvi., 238. London: H. K. Lewis. 1891.

We had occasion to notice favourably the first edition of this work, and the present issue follows the usual custom of having much new matter added, so that the size of the book is somewhat increased. The new material includes the important complications and sequelæ of middle-ear suppuration, including mastoiditis and cerebral abscess; it also includes a chapter on naso-pharyngeal disease. The whole is brought well up to date, and forms a valuable handbook for the student or practitioner.

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*Contributions to Practical Medicine.* By Sir JAMES SAWYER, Knt. Second Edition. Pp. 201. Birmingham: Cornish Brothers. 1891.

This book contains a series of disconnected essays on subjects which have been of interest, and have given repute, to the author; they were for the most part written many years ago, are now altogether out of date, and are not of sufficient clinical value to justify the present republication.

The essay on phthisical laryngitis, written in 1875, is said to have been "since revised and entirely rewritten;" and yet the author's observations lead him to conclude "that the local lesions in the larynx in phthisis are inflammatory, and

unconnected with truly tubercular processes." Surely the author has never seen a section of laryngeal mucous membrane with the tissues infiltrated to a considerable depth with the specific products of tubercular action and crowded with bacilli.

The treatment of phthisical laryngitis, written in 1883, and professedly rewritten up to date, contains no reference to the use of cocaine, menthol, or lactic acid. The essay cannot be looked upon as a trustworthy guide, and is not worthy of serious criticism.

The essays on intestinal obstruction, pulmonary accentuation, floating kidney, and the treatment of gastralgia, give the views of an experienced observer in these subjects and are well worthy of perusal, but on the whole we think that the author's reputation will not be enhanced by a volume which needs in its preface an apology for incompleteness on the ground of pressure of daily clinical work.

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*Practical Manual on Diseases of Women and Uterine Therapeutics.* By H. MACNAUGHTON JONES, M.D., M.Ch. Fifth Edition. Pp. xl., 704. London: Baillière, Tindall and Cox. 1891.

The simple fact that this work has gone through five editions in seven years speaks for itself. The book can certainly be recommended as giving in a small compass a clear and comprehensive view of the practice and science of diseases of women.

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*Notes on the Examination of the Sputum, Vomit, Fæces, Urine and Blood.* By SIDNEY COUPLAND, M.D., F.R.C.P. Second Edition. Pp. 57. London: H. K. Lewis. 1891.

That a second edition of Dr. Coupland's *Notes* has been called for within nine months of the first issue shows that it supplies a real want. It will be found an useful aid to students in carrying out their clinical duties, and its value is increased in this edition by the addition of a chapter on the examination of the blood.

*The Treatment of Typhoid Fever especially by Antiseptic Remedies.* By J. BURNEY YEO, M.D., F.R.C.P. Pp. 70. London: Cassell & Co. 1891.

In this little book much information is conveyed in moderate compass, and those who wish to learn the most improved methods of treatment of typhoid fever will get real help from it. Dr. Yeo fully considers the "antiseptic" treatment of typhoid, which has been brought into prominence of late. He gives an account of the various ways in which different physicians carry it out, with a description of his own plan of treatment, for the details of which the reader may be referred to the book itself. In Dr. Yeo's hands, as in those of other observers, this treatment has been attended with very good results, and as it gradually becomes perfected will we think more and more recommend itself as the most sound and rational mode of combating the disease.

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*A Pocket Epitome of the British Pharmacopœia.* By RUSSELL COOMBE, M.A., F.R.C.S. Pp. vi., 90. London: Baillière, Tindall and Cox. 1891.

The title of this little book, which can easily be carried in the waistcoat pocket, indicates the nature of its contents. The epitome seems to be well and accurately done, is arranged in a manner suitable for ready reference, and the type is clear.

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*Nerve Prostration, and other Functional Disorders of Daily Life.* By ROBSON ROOSE, M.D., LL.D., F.C.S. Second Edition. Pp. xxii., 671. London: H. K. Lewis. 1891.

A second edition calls for little comment. The book is growing in proportion to the growth in experience of its author, who interprets the term "functional" on very liberal principles, and has produced nearly seven hundred pages, in excellent type, on the best of paper, teeming with the matured convictions of one who has every claim to write with authority on the little ills of every-day life and the "little health of ladies." The tired practitioner may take it up at odd moments, and his patients will probably benefit thereby.

*Spasmodic Wry-neck and other Spasmodic Affections of the Head, Face, and Neck.* By NOBLE SMITH, F.R.C.S.E. Pp. 55. London: Smith, Elder & Co. 1891.

The true form of spasmodic wry-neck as distinguished from the hysterical is well known to follow a very obstinate course, and to be little amenable to treatment. In the failure of therapeutic remedies, various surgical procedures have been proposed and carried out from time to time, hitherto without much success. The latest operation, which Mr. Noble Smith advocates in this pamphlet, is the excision of a portion of the spinal accessory just before it enters the sterno-mastoid, and if the muscles at the back are affected, of portions of the posterior cervical nerves. This operation has now been adopted in several obstinate cases with gratifying results, and would seem to promise success in the future.

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*Ophthalmic Charts.* By FRANK HAYDON. London: Down Bros.

These charts will be found of much service in the diagrammatic representation of diseases or abnormalties of the eye. On one set can be drawn the surface appearances of the eyeball; on another what is seen or suspected after a section of the globe. Ophthalmoscopic examination can be represented on a good-sized coloured chart.

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*Saturn's Kingdom; or, Fable and Fact.* By CHARLES MOORE JESSOP. Pp. xiii., 294. London: Kegan Paul, Trench, Trübner & Co. 1891.

This book might well be entitled the evolution of

"The great globe itself [and] all which it inherit."

It begins with the mythological story of Saturn, as the son of Heaven, because the apparent motion of the starry universe is a measure of time; and as the son of Earth, because the ebbing and flowing of the sea is likewise a measure of time; and continues with the mythical Bathybius of Hæckel, and the story of the Neanderthal skull and other beginnings of man himself. It then leads up by numerous entertaining chapters on a multiplicity of subjects to the time when "life on earth may have terminated from a deficient food-supply

for increased population; or from the decrease of intrinsic and extrinsic heat; or, through the onward course of the solar system, this earth may have come into contact with some dark body of another system of equal magnitude moving at an equal rate, when collision would at once terminate its career." It is obvious that the book is crowded with topics of surpassing interest.

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*The Leeward Islands Medical Journal.* Edited by H. A. ALFORD NICHOLLS, M.D. Pp. xii., 188. London: J. & A. Churchill. 1891.

We heartily congratulate the members of the recently-formed Leeward Islands Branch of the British Medical Association upon this substantial volume, the result of good work, doubtless often done under somewhat difficult circumstances. The book, which has more the character of a volume of Transactions than of a Journal, contains many papers on subjects with which we are not very familiar here; and for these, coming from medical men with special opportunities for observation, we are grateful. The Branch has been fortunate in getting the Government to bear the expense of publishing the proceedings in book-form.

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*The Year-Book of Treatment for* 1892. Pp. 486. London: CASSELL & COMPANY, LIMITED.

This present number of *The Year-Book of Treatment* gives a very complete summary of the most important papers on therapeutics published during the past year, and thus forms a trustworthy book of reference to the recent advances in treatment in surgery, medicine, and the other branches of our art. We may say of the book as a whole that the abstracts are uniformly well done, judiciously selected, and arranged in convenient form for ready reference. It is hardly necessary to say more of the individual sections than that all the writers give a satisfactory account of the year's work in their respective subjects. As might be anticipated, the accounts of the clinical experiments made with Koch's tuberculin take up a good deal of space in many of the sections. The immense amount of work that has been done in investigating the value of the remedy here becomes apparent. No treatment of recent times has received so thorough a trial in all

quarters of the globe, and, we may add, few, if any, have so completely been found wanting. After the sections on the treatment of diseases, follows a summary of the new therapeutic remedies introduced during 1890-91, a selected list of new books and of new editions—English, French, German, and Italian,—and last, but not least, a full index to authors' names and to subjects.

The book may be cordially recommended as fully maintaining the reputation that the former issues have gained.

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*The Medical Annual.* Pp. 652. Bristol: JOHN WRIGHT & Co. 1892.

The *Medical Annual* maintains its high level of usefulness and attractiveness. It is a more ambitious production than the *Year-Book*, inasmuch as its summaries have much more the character of special articles than of mere abstracts, and the bookbinder's work is better done. Among the more noteworthy of its articles are those by Mr. Hurry Fenwick on the Bladder, that on the Surgery of the Brain by Mr. Eve, that on the Surgery of the Spinal Cord by Mr. Thorburn, and that on Phthisis by Dr. Shingleton Smith. Specially acceptable are the original contributions of Dr. Armand Ruffer on Bacteriology, and of Mr. Pringle on Medical Photography.

The proof-reading of the *Annual* has not been very carefully done. We noticed "perityplitis" at p. 105 in Mr. Mayo Robson's note on Appendicitis, and "mesentry" in Plate VII. facing p. 547. The first two lines of p. 86 have surely escaped revision. Professor Horsley's name is distorted on p. 126. In the article on Phthisis, someone is responsible for having corrupted both the Christian name and surname of Dr. Heneage Gibbes, and on opposite pages Mr. Mayo Robson offers us a correct and an incorrect spelling of Dr. Einhorn's name. The advertisements in the *Annual* are encroaching too much on the other part of the book.

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*Golden Rules of Surgical Practice.* By A HOSPITAL SURGEON. Pp. 53. Bristol: JOHN WRIGHT & Co. [n.d.]

For the weak and the rash and the ignorant and the foolish, aphorisms and dicta have their value; but amongst the educated, in this age of culture, sound practice is best

based on well-reasoned knowledge. We confess to a hearty dislike for all rules of thumb, even when written for "dressers and junior house surgeons," and this dainty little booklet in no degree removes this dislike.

There is little to cavil at as regards the sense of the rules; they are mostly common and trite enough, and therefore mostly correct. The author assumes perhaps too much, however, when he calls the rules "golden." These, for instance—"Never forget to warn your patient that a Colles' fracture, even when treated with the greatest care, leaves some deformity," "Never forget to warn the parents of a harelip *(sic!)* that one operation is usually inadequate"—suggest that the author's surgery is not of that sort from which golden rules can be readily evolved.

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*Small Clinical Charts.* London: H. K. LEWIS.

These clinical charts are modelled on the ordinary type, and the temperature may be registered by them either in degrees Fahrenheit or Centigrade. They are very much smaller than those commonly in use, and may thus be found more convenient for special uses. Though small, they are very clearly printed.

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*Epidemic Influenza: Notes on its Origin and Method of Spread.* By RICHARD SISLEY, M.D. Pp. xi., 150. London: Longmans, Green & Co. 1891.

*A Study of Influenza and the Laws of England concerning Infectious Diseases.* By RICHARD SISLEY, M.D. [Second Edition]. Pp. 119. London: Longmans, Green & Co. 1892.

The first of these volumes was published in 1891, before the issue of Dr. Parsons' Report to the Local Government Board, and consists of notes confessedly incomplete, but compiled with considerable care, tending to show the manner of origin and spread of influenza; and, in particular, insisting upon the infectious nature of the malady and the consequent necessity for precautions against its spread, the neglect of which has, Dr. Sisley states, led to much suffering and to the loss of many lives.

The series of instances adduced by the author to prove the infectious nature of the disease has been abundantly confirmed by the results of Dr. Parsons' enquiry; but his further contention that notification of influenza should be compulsory under the Act of 1889, cannot be supported as likely to result in any useful control of its spread, for reasons fully set forth in the recent Provisional Memorandum of the Local Government Board of date January 23rd, 1892; chief amongst which are the indefinite and obscure symptoms of very many cases, and the shortness of the incubation period, leading to rapid and uncontrollable spread.

In the second volume under notice Dr. Sisley adopts a position with which we can cordially agree. "I am still of opinion," he writes, "that had a short Act of Parliament placed influenza amongst the diseases for which notification is compulsory, much sickness and many deaths would have been avoided. The good would have been done chiefly in an indirect manner. A discussion on such a Bill in Parliament would have concentrated public attention on the subject, the evidence of the Local Government Board would have received immediate and wide-spread recognition, and in this way people would have been taught that influenza was chiefly, if not entirely, spread by contagion, and they might have acted on their knowledge of that fact."

Dr. Sisley also points out that—apart from the application of legal enactments—individuals, families, and small communities may do much to avoid infection, and speaks in high terms of the action of the Dover authorities in warning persons, by their now historical document, of the danger of exposing themselves in public when suffering from influenza, and of the penalties attaching to the exposure of persons suffering from dangerous infectious disorders. In this commendation we heartily concur.

The volume contains, in addition, a summary of the laws in force relating to infectious disease, and the Provisional Memorandum on Influenza above referred to; and should prove useful to all who are concerned in public health administration.

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*International Clinics.* Vol. II. Pp. 356. Edinburgh: YOUNG J. PENTLAND. 1891.

The editors have again presented us with a very useful and instructive series of clinical essays. The subjects treated of are representative of all the great divisions of the

healing art. The general level of the contributions is of a high order of excellence, as we should expect from the well-known names of the contributors. From the nature of the book it is of course not to be expected that all the lectures should be equally good, but we can safely affirm that there is not one which will not repay perusal. Their general aim is above all practical, and they must prove of great value to the practitioner by placing him *au courant* of the views held on the diseases discussed by those who have attained to eminence in studying them.

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*Scatalogic Rites of All Nations.* By Captain JOHN G. BOURKE. Pp. 496. Washington: W. H. Lowdermilk & Co. 1891.

Many vile deeds have been done in the name of religion; in all ages and in every form of worship the cult of filth has somehow crept in. The curious in this unsavoury department of knowledge will, in this work, find an extraordinary collection of facts, gathered from every possible source, which have any bearing directly or indirectly on the ritual worship of pure filth. The pure philosopher may trace the gradations between an existence in sackcloth and ashes, and the eating of human excrement; the medical man will probably class the habits as outcomes of aberrations of intellect begotten of excessive or ill-directed zeal in a cause which erring human nature has much at heart.

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*A Code of Rules for the Prevention of Infectious and Contagious Diseases in Schools.* Third and Revised Edition. Pp. 35. London: J. & A. Churchill. 1891.

The issue of a third edition of this very valuable *Code*, drawn up by the Medical Officers of Schools Association, shows that the two previous editions have been deservedly appreciated. The alterations, though slight, tend to simplicity and usefulness, and the new edition of this handbook will continue to form an indispensable guide to schoolmasters, medical attendants, and parents.

# Notes on Preparations for the Sick.

**Peptonoids Iron and Wine. Maltine with Cascara Sagrada. Maltine with Lime. Maltine with Pepsin and Pancreatine. Tablets of Cascara Sagrada with Chocolate.**—Maltine Manufacturing Company, London.

The preparations of the Maltine Manufacturing Company are for the most part well known, but deserve to be more so. The peptonoid powder, and its cordial-like solutions, in combination with coca, or with pyrophosphate of iron in sherry, are invaluable medicines where the maintenance of nutrition is of primary importance.

The use of maltine as a vehicle for nauseous drugs is being well recognised. The various combinations have an infinitude of utility, are well devised, and have been abundantly proved to be efficient.

**Liquor Carnis. Beef-Tea Jelly. Malto-Carnis. Malto-Carnis and Cocoa. Carnis Suppositories.** —Liquor Carnis Company, London.

The uncooked juice of beef in an agreeable form, always ready for use, and yet capable of being preserved indefinitely, must be invaluable in the sick-room.

The one drawback is the sweetness of liquor carnis. An attempt has been made to overcome this by flavouring with celery, and the fluid may be given disguised in many ways. It may be mixed with warm fluids, soups, coffee, cocoa, arrowroot, &c., or it may be taken cold with port wine, diluted spirit, or lemon squash—in either case without loss of its nutritive value. It is also an ideal fluid for rectal administration where nutrient enemata are required. It contains an amount of soluble albumin equal to 1.5 per cent. as estimated by Esbach's albuminimeter. The term "fluid muscle," which its makers sometimes use in describing it, expresses the value which is set upon it.

Malto-Carnis contains two-thirds of the liquor in combination with extract of malt and cocoa. It is an ideal food

for use in cases of debility from any cause, and as it contains no sugar it may be added to the restricted list of foods suitable for diabetics. Taken in hot milk, it forms a most nutritious draught, and many patients who have become tired of everything else have been grateful for its introduction.

The Suppositories are prepared by the addition of a colloid medium, which melts readily at the temperature of the body, and each of them contains the equivalent of two drachms of the liquor. It has been found by experiment that the albumin of expressed meat juice is absorbed to nearly the same extent as complete peptone.

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**Hartmann's Wood Wool Wadding. Wood Wool Tissue. Hygienic Wood Wool Diapers. Wood Wool Gonorrhœa Bags. Wood Wool Vaccination Pads. Wood Wool Antiseptic Sponge.**—THE SANITARY WOOD WOOL COMPANY, London.

Hartmann's Wood Wool is the most absorbent dressing known. The principal objection to its use is the want of cohesion of its particles, and this objection is overcome in the various useful preparations now made by the Sanitary Wood Wool Company.

The *Wood Wool Wadding* is as easily manipulated as cotton wool, and is much more absorbent. It is prepared either plain or medicated with various antiseptics, such as corrosive sublimate, carbolic acid, salicylic acid, &c., and in these forms it is probably the most perfect dressing for wounds ever invented.

*Wood Wool Tissue* is prepared in sheets, and consists of a layer of wood wool between two layers of muslin; it is very absorbent and easily applied.

*Wood Wool Diapers* are invaluable to ladies while travelling or after parturition. The ordinary linen napkin is so slightly absorbent that it serves to retain secretions in the vagina, but these diapers are comfortable, clean, and healthful. The same remarks apply to the *Wood Wool Gonorrhœa Bags*, which are muslin bags lined with wood wool, rendered antiseptic by corrosive sublimate, and furnished with two tapes, by means of which they may be fastened around the waist. They are very cleanly, preventing any soiling of the clothes by the discharge, and thereby diminish the risk of infecting other mucous surfaces.

The *Vaccination Pads* are prepared with a layer of wood wool to go next the vesicles and a layer of muslin over, with tapes for fastening in position. They would be invaluable for the very sore arms occasionally met with after vaccination.

*Wood Wool Antiseptic Sponges* are calculated to displace entirely the old-fashioned sponges used during operations. In the well-regulated operation room one now hardly ever sees an ordinary sponge in use, and these wood wool sponges are simple, clean, and cheap, so that they can be freely used, and burnt afterwards.

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**Dermatol.**—BURROUGHS, WELLCOME & Co., London.

Dermatol is intended for use in some skin affections and as a general substitute for iodoform. It is insoluble in water, very stable, and quite odourless, which gives it an immense superiority over iodoform. It seems to have strong antiseptic properties; for granulation wounds and surfaces discharging sloughs keep quite healthy and free from putrefaction under its use. For intertrigo and skin excoriations it should be used mixed with starch, and then it forms a most soothing application.

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Mr. F. J. Rebman, of 40 Berners Street, London, who is the agent for the Animal Lymph cultivated from calf to calf at the Institute of Dr. Pissin, Berlin, has sent us specimens of the two kinds which are supplied, with each of which we have produced excellent vesicles. One of the kinds is emulsified, and is recommended in those cases where the lymph has to be kept for some time.

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## Bristol Medico-Chirurgical Society.

*January 13th*, 1892.

Mr. F. R. CROSS, President, in the Chair.

The following card specimens were shown:—(1) By Mr. C. A. MORTON: (*a*) Primary necrosis of pubes, with secondary destructive disease of the hip-joint and psoas abscess, from a baby; (*b*) malignant stricture of rectum; and (*c*) large tubercular growth in finger, resembling a tumour. (2) By Dr. ROGERS: a mass of uric acid removed from an abscess in a gouty patient.

Dr. HARRISON and Dr. WALDO gave a demonstration on some interesting skin cases. Amongst these were: (1) Urticaria

pigmentosa in a girl aged 16; (2) Erythema induratum in a woman, shown by Dr. Harrison: and (1) diffuse favus of the scalp; (2) kerion, following tinea tonsurans; (3) lupus of face much improved by cauterisation with acid nitrate of mercury; (4) diffuse pigmentation following lichen verrucosa, by Dr. Waldo.

Dr. BARRETT ROUÉ showed a case of eczema sqamosum.

Mr. C. H. WALKER showed a patient with retinal hemorrhages.

Dr. EWEN MACLEAN exhibited an instrument for the accurate estimation of the knee-jerk. (See p. 20.)

Dr. WATSON WILLIAMS read a paper on auscultatory percussion as a means of gaining accurate knowledge as to the size of the heart during life. Diagrams were shown in which the cardiac dulness had been mapped out, and the area thus obtained verified by *post mortem* examination. It was maintained that this method gave much better results than those hitherto employed.

Dr. MICHELL CLARKE showed three specimens of mitral, complicated by tricuspid, stenosis, and pointed out how this might be clinically recognised by the early occurrence of ascites and enlargement of the liver, &c. Microscopic specimens of the diffused hepatic cirrhosis met with in these cases were shown. A saccular aneurism of the aortic arch was also shown, of which the only symptom during life was paralysis of the left vocal cord.

Mr. EWENS exhibited (1) a boy who had suffered from necrosis of right tibia, partial dislocation backwards at knee-joint, and displacement of head of femur on to dorsum ilii. The knee-joint was excised, the neck of the femur subcutaneously divided, and a useful limb resulted; (2) A girl who had been cured of double genu valgum by Macewen's operation on the thigh, and removal of wedge-shaped piece of bone from the tibia.

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*February 10th*, 1892.

Mr. F. R. CROSS, President, in the Chair.

The PRESIDENT announced the death of Dr. Burder, one of the Past Presidents of the Society, which took place on February 6th, and spoke of the deceased's connection with the General Hospital and Medical School, and of his skill as a meteorologist. A resolution was passed expressing sympathy with Dr. Burder's friends, and recording the loss the Society had sustained by his death.

Mr. C. A. MORTON exhibited several specimens of tubercular hip-joint disease, together with microscopic sections.

Mr. F. P. LANSDOWN showed a specimen of bullet-wound of the external iliac artery from a boy who had been accidentally shot.

Dr. MARKHAM SKERRITT read notes on a case of chyluria. The patient, a lady, first suffered from it in the West Indies, and during the last seven years had had repeated attacks. A filaria was found in the urine, which fluid was milky, with a soft clot. Dr. Skerritt also showed a large sarcoma growing from the ovary of a woman, aged 23. The mass filled the lower part of the abdomen, and there

were deposits of pedunculated growths on the abdominal walls and intestines, evidently arising from contact with the original tumour.

Mr. C. H. WALKER showed a specimen, with photograph, of an eyeball with a calcareous, dislocated lens, which had caused sympathetic irritation in the opposite eye. The original injury was a gun-shot wound thirty-four years ago; the shot had entered the lower part of the ciliary region and passed out near the entrance of optic nerve, causing complete blindness. Recovery quickly followed removal of this eye.

Dr. B. M. ROGERS read a paper on Micro-Organisms and Immunity from Disease. He divided the diseases which were generally supposed to be due to germs into two classes (1): those which were obviously due to this cause; and (2) the acute specific fevers, the etiology of which he considered not yet established. He pointed out that in these latter, one attack conferred protection; whereas in the first class, second or numerous attacks were common. The evidence of various authorities was quoted as to second attacks in diphtheria, erysipelas, cholera, &c. The belief was expressed that protective vaccinations with attenuated virus would not produce permanent immunity. Dr. Rogers maintained that as the diseases *certainly* caused by germs gave no protection from subsequent attacks, in those in which a second attack is rare the cause must not be sought for amongst micro-organisms or their products.

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*March 9th*, 1892.

Mr. F. R. CROSS, President, in the Chair.

Dr. OGILVY showed a boy with an eyelash in the anterior chamber, and a small (probably sebaceous) tumour growing from its root, which was situated at the corneal margin. It was carried into the eye with a piece of wire, which caused a traumatic cataract.

Dr. PROWSE read notes of a case of adherent and thickened pericardium, and showed the specimen, which was from a man aged 25, who had suffered for some months before his death from shortness of breath, dyspnœa on exertion, and œdema of the limbs. He was tapped both in the pleuræ and abdomen on several occasions and a large quantity of fluid removed, with temporary relief. The pericardium was found, *post mortem*, to be very thick, almost cartilaginous in places, and firmly adherent to the heart, œsophagus, and trachea. There was evidence of fibroid change in other organs (liver, spleen, &c.).

Dr. BARRETT ROUÉ described a case of diphtheria in a child aged 19 months, following measles, in whom intubation of the larynx was performed for urgent dyspnœa. Recovery took place. The comparative merits of tracheotomy and intubation were discussed and statistics quoted.

Mr. MORTON showed drawings and specimens of five cases of tubercle of the choroid. He called attention to the microscopic

structure of these growths, the ophthalmoscopic appearances and the diagnosis from patches of choroidal atrophy, and laid stress on the frequency of this condition in tubercular meningitis.

He also showed two specimens, with microscopic sections and drawings, of tubercular ulcers of the tongue. He pointed out the characteristics by which these ulcers could be distinguished from epithelioma, and discussed the methods by which the tongue became inoculated with the tubercle bacillus.

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At a Meeting of the Committee, held on March 11th, the following Resolution was unanimously passed:

> "The Members of the Committee of the Bristol Medico-Chirurgical Society accept with much regret Mr. J. Greig Smith's resignation of the post of Editor of the Society's *Journal*, an office which he has held with such distinguished ability since the foundation of the *Journal* in 1883. They desire to express the great obligation which the Society is under to him for the leading part he took in the creation of the *Journal*, and for the time and ability which he has expended in its conduct and development."
>
> G. Munro Smith, *Hon. Sec.*

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## The Library of the Bristol Medico-Chirurgical Society.

*The following donations have been received since the publication of the List in December:*

*February 29th*, 1892.

J. Michell Clarke, M.B. (1) ... ... ... ... 22 volumes.
W. Duncan. (2) ... ... ... ... ... ... ... 2 ,,
L. M. Griffiths. (3) ... ... ... ... ... ... 5 ,,
Clements D. G. Hailes, M.D. (4) ... ... ... 1 volume.
W. H. Harsant. (5) ... ... ... ... ... ... 39 volumes.
J. E. Shaw, M.B. (6) ... ... ... ... ... 2 ,,
R. Shingleton Smith, M.D. (7) ... ... ... 1 volume.
J. G. Swayne, M.D. (8) ... ... ... ... ... 1 ,,

Framed pictures have been presented by Miss Amy Blew, Mr. Nelson Dobson, and Dr. Shingleton Smith.

# THIRD LIST OF BOOKS.

The figures in brackets refer to the figures after the names of the donors, and show by whom the volumes were presented. The books to which no such figures are attached have either been bought from the Library Fund or received through the *Journal*.

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**Aitken, W.** ... *The Science and Practice of Medicine.* (1) Vol. II. 3rd Ed. 1864

*Aneurism, Observations on* (Tr. and Ed. by J. E. Erichsen) ... (5) 1844

**Aretæus** (The Cappadocian). *Extant Works*—Greek and English. (Ed. and Tr. by F. Adams) ... ... ... (5) 1856

**Auld, A. G.** ... *The Pathology of Bronchial Affections and Pneumonia* 1891

**Aulde, J. V. Shoemaker and J.** *Materia Medica, Pharmacology, and Therapeutics* ... ... ... ... ... (6) Vol. I. 1889

**Ballance and W. Edmunds, C. A.** *Ligation in Continuity* ... ... ... 1891

**Barr, J.** ... ... *The Treatment of Typhoid Fever* ... ... ... ... 1892

**Belcher, Rev. Dr.** *The Miracles of Healing* ... ... ... 2nd Ed. [1890]

**Bigg, H. H.** ... *On Deformities.* Part II. The Spine and Upper Extremities ... ... ... ... ... ... ... (1) 1862

**Bramwell, B.** ... *Atlas of Clinical Medicine.* Vol. I., Part III. ... 1891

**Bristowe, J. S.** ... *The Theory and Practice of Medicine.* (1) 2nd Ed. 1878

**Buret, F.** ... ... *Syphilis To-day and Among the Ancients.* (Tr. by A. H. Ohmann-Dumesnil). Vol. I. ... ... 1891

**Chelius, J. M.** ... *System of Surgery.* (Tr. by J. F. South.) 2 vols. (1) 1847

**Coltman, R., Jr.**... *The Chinese—Medical, Political, and Social* ... ... 1891

**Dale, W.** ... ... *Inherited Consumption* ... ... ... ... ... ... 1891

**Davis, N. S., Jr.**... *Consumption* ... ... ... ... ... ... ... ... 1891

**Dupuytren, Baron** *Diseases and Injuries of Bones.* (Tr. and Ed. by F. le Gros Clark) ... ... ... ... ... ... (5) 1847

,, *Lesions of Vascular System.* (Tr. and Ed. by F. le Gros Clark) ... ... ... ... ... ... (5) 1854

**Edmunds, C. A. Ballance and W.** *Ligation in Continuity* ... ... ... 1891

**Erichsen, J.** ... *Science & Art of Surgery* (1) 2nd Ed. 1857 (1) 4th Ed. 1864

**Feuchtersleben, Baron.** *Medical Psychology.* (Tr. by H. E. Lloyd and Ed. by B. G. Babington) ... ... ... (5) 1847

**Foster, M.** ... ... *Practical Physiology.* (Assisted by J. N. Langley). (1) 4th Ed. 1880

**Foster, M.** ... ... *Text-book of Physiology.* Parts III., IV. 5th Ed. Revised ... ... ... ... ... ... ... ... 1890-91
**Fraser, A.** ... ... *A Guide to Operations on the Brain* ... ... ... 1890

**Gotch and V. Horsley, F.** *On the Mammalian Nervous System* ... ... 1891
**Gruber, J.** ... ... *Diseases of the Ear.* (Tr. and Ed. by E. Law and C. Jewell) ... ... ... ... ... .. ... 1890

**Hare, H. A.** ... *Epilepsy: its Pathology and Treatment* ... ... (6) 1890
**Harris and D. Power, V.** *Physiological Laboratory.* (1) 2nd Ed. 1882
(1) 3rd Ed. 1884
**Hartridge, G.** ... *The Ophthalmoscope* ... ... ... ... ... ... ... 1891
**Harvey, W.** ... *Works.* (Tr. by R. Willis) ... ... ... ... (5) 1847
**Hasse, C. E.** ... *Pathological Anatomy.* (Tr. and Ed. by W. E. Swaine) ... ... ... ... ... ... ... ... (5) 1846
**Herman, G. E.** ... *First Lines in Midwifery* ... ... ... ... ... ... 1891
**Hewson, W.** ... *Works.* (Ed. by G. Gulliver) ... ... ... (5) 1846
**Hillis, J. D.** ... *Leprosy in British Guiana* ... ... ... ... (2) 1881
**Hippocrates** (Cos) *Genuine Works.* (Tr. and Ed. by F. Adams.) 2 vols. ... ... ... ... .. ... ... ... (5) 1849
**Horsley, F. Gotch and V.** *On the Mammalian Nervous System* ... ... 1891
**Huidekoper, R. S.** *Age of the Domestic Animals* ... ... ... ... ... 1891

*Infectious and Contagious Diseases in Schools, A Code of Rules for the Prevention of* ... ... ... ... ... ... 3rd Ed. 1891
*Influenza, Annals of* (Ed. by T. Thompson) ... ... ... ... ... (5) 1852

**Jessop, C. M.** ... *Saturn's Kingdom* ... ... ... ... ... ... ... 1891
**Johnson, E.** ... *Results of Hydropathy* ... ... ... ... ... ... (1) 1846

**Kingsbury, G. C.** *The Practice of Hypnotic Suggestion* ... ... ... 1891
**Kirkes, W. S.** ... *Hand-book of Physiology.* (1) 2nd Ed. (Assisted by J. Paget) 1851. (1) 5th Ed. 1863
**Kölliker, A.** ... *Manual of Human Histology.* (Tr. and Ed. by G. Busk and T. Huxley.) 2 vols. ... ... 1853-54
**Küchenmeister, F.** *Manual of Parasites.* 2nd Ed. (Tr. by E. Lankester.) 2 vols. ... ... ... ... ... (5) 1857

**Louis, P. C. A.** ... *Researches on Phthisis.* 2nd Ed. (Tr. by W. H. Walshe) ... ... ... ... ... ... ... ... (5) 1844

**Maclaren, P. H.**... *Atlas of Venereal Diseases* ... ... ... ... (4) 1886
**Maclise, J.** ... ... *Surgical Anatomy* ... ... ... ... (2) 2nd Ed. 1856
**Martindale, W.**... *Coca and Cocaine* ... ... ... ... ... 2nd Ed. 1892
**M'Bride, P.** ... *Diseases of the Throat, Nose, and Ear* ... ... ... 1892
**Moore, J. W.** ... *Eruptive and Continued Fevers* ... ... ... ... ... 1892

**Nayler, G.** ... ... *Diseases of the Skin* ... ... ... ... ... ... (1) 1866

**Oesterlen, F.** ... *Medical Logic.* (Tr. and Ed. by G. Whitley.) (5) 1855

**Paulus** (Ægineta) *Seven Books.* (Tr. by F. Adams.) 3 vols. (5) 1844-47
**Politzer, A** ... *The Human Ear.* (Tr. by G. Stone) ... . ... 1892
**Power, V. Harris and D.** *Physiological Laboratory.* (1) 2nd Ed. 1882
(1) 3rd Ed. 1884
**Prochaska, J. A Unzer and G.** *On the Nervous System.* (Tr. and Ed. by T. Laycock) ... ... ... ... ... ... (5) 1851
**Puschmann, T.** ... *History of Medical Education.* (Tr. by E. H. Hare) 1891
**Pye, W.** ... ... *Surgical Handicraft.* 3rd Ed. (Ed. by T. H. R. Crowle) ... ... ... ... ... ... ... ... 1891

**Ramsbotham, F. H.** *Obstetric Medicine and Surgery.* (1) 2nd Ed. 1844
**Rhazes, —**.... .. *On the Small-pox and Measles.* (Tr. by W. A. Greenhill) ... ... ... ... ... ... ... (5) 1848
**Roberts, W.** ... *On Urinary and Renal Diseases* ... (1) 2nd Ed. 1872
**Rokitansky, C.** ... *Pathological Anatomy.* 4 vols. (5) Vol. I. (Tr. by W. E. Swaine) 1854; (5) Vol. II. (Tr. by E. Sieveking) 1849; (5) Vol. III. (Tr. by C. H. Moore) 1850; (5) Vol. IV. (Tr. by G. E. Day) ... ... ... ... ... ... .. ... 1852
**Romberg, M. H.**... *Diseases of the Nervous System.* (Tr. and Ed. by E. H. Sieveking.) 2 vols. ... ... ... ... (5) 1853
**Rose, W**. ... ... *Harelip and Cleft Palate* ... ... ... ... ... ... 1891

**Schleiden, T. Schwann and M. J.** *Researches.* (Tr. by H. Smith.) (5) 1847
**Schwann and M. J. Schleiden, T.** *Researches.* (Tr. by H. Smith.) (5) 1847
**Shaw, J.** ... ... *Epitome of Mental Diseases* ... ... ... ... .. 1892
**Shoemaker and J. Aulde, J. V.** *Materia Medica, Pharmacology, and Therapeutics* ... ... ... ... ... (6) Vol. I. 1889
**Siebold, C. T. v.** ... *On Worms.* (Tr. by T. H. Huxley) .. ... (5) 1857
**Simon, J. F.** ... *Chemistry.* (Tr. and Ed. by G. E. Day.) 2 vols. (5) 1845-46
**Sisley, R.** ... ... *Epidemic Influenza* ... ... ... ... .. .. ... 1891
,, ... ... *A Study of Influenza and the Laws of England concerning Infectious Diseases.* .. ...[2nd Ed.] 1892
**Steven, J. L.** ... *Mediastinal Tumours* ... ... ... ... ... ... ... 1892
*Surgery, Memoirs of the Academy of* (Tr. and Ed. by D. Ottley.) (5) 1848
**Sutton, J. B.** ... *Surgical Diseases of the Ovaries and Fallopian Tubes* 1891
**Swayne, J. G.** ... *Obstetric Aphorisms* ... ... ... (8) 9th Ed. 1888
**Sydenham, T.** ... *Opera Omnia.* (Ed. by W. A. Greenhill.) (5) 1844
,, ... *Works.* (Tr. by R. G. Latham.) 2 vols. (5) 1848-50

**Tanner, T. H.** ... *The Practice of Medicine.* 2 vols. (1) 6th Ed. 1869
**Thomson, T.** ... *Animal Chemistry* ... ... ... ... ... ... (1) 1843

**Treves, F.** ... ... *A Manual of Operative Surgery.* 2 vols. ... ... 1891
**Tuckey, C. L.** ... *Pyscho-Therapeutics* ... ... ... ... ... 3rd Ed. 1891

**Unzer and G. Prochaska, J. A.** *On the Nervous System.* (Tr. and Ed. by T. Laycock) ... ... ... ... ... ... (5) 1851

*Vaccination Commission.* 3rd Report ... ... ... ... ... ... (5) 1890
**Velpeau, A.** ... *Diseases of the Breast.* (Tr. by M. Henry.) (5) 1856

**Wedl, C.** ... ... *Pathological Histology.* (Tr. and Ed. by G. Busk.) (5) 1855
*Women, Diseases Peculiar to* (Ed. by F. Churchill) ... ... ... (5) 1849

## TRANSACTIONS, REPORTS, JOURNALS, &c.

*The List of current Periodicals to be seen in the Library is given in another part of this Number.*

Bristol Medico-Chirurgical Journal. Vol. IX. ... ... ... ... 1891
British Journal of Dermatology, The Vol. III. ... ... ... ... 1891
British Medical Journal, The Vol. II. for 1891 ... ... ... .. 1891
British Medical Journal, Supplement to the ... ... 1891. II. ... 1891
Glasgow Medical Journal, The Vol. XXXVI. ... ... ... ... ... 1891
Hospital, The Vol. X. ... ... ... ... ... ... ... ... ... ... 1891
Hospitals—
Johns Hopkins Hospital Reports. Vol. II., Nos. 7, 8, 9 ... 1891
Middlesex Hospital. Registrars' Reports... ... ... ... ... 1890
Journal of Cutaneous and Genito-Urinary Diseases. Vol. IX. ... 1891
Journal of Physiology, The ... ... ... ... ... (7) Vol. XI. 1890
Lancet, The Vol. II. for 1891 ... ... ... ... ... ... ... ... 1891
Medical Directory, The ... ... ... ... ... ... ... ... ... ... 1892
Medical Record, The Vol. XL. ... ... ... ... ... ... ... ... 1891
New York Medical Journal, The Vol. LIV. ... ... ... ... ... 1891
Progrès médical, Le ... ... (1) Tomes VII. and VIII., 1888;
(1) Tomes IX. and X., 1889; (1) Tomes XI. and XII. 1890
Retrospect of Medicine, Braithwaite's (3) Vols. LXV.—LXIX. 1872–74
Therapeutic Gazette, The Vol. XV. ... ... ... ... ... ... ... 1891
Union médicale, L' 3rd Series. Tome LII. ... ... ... ... ... 1891
Year-book of Treatment, The ... ... ... ... ... ... ... ... 1892

In Vol. ix., p. 318, line 4 from top, for 1821 read 1891.

# Obituary.

## GEORGE FORSTER BURDER, M.D., F.R.C.P.

It is with much regret that we record the death of Dr. Burder, which took place very suddenly and unexpectedly on Saturday evening, February 6th. He had been out daily, as usual, and on the previous Thursday had read before the Bristol Naturalists' Society a very interesting paper on "Rainfalls and Floods in the neighbourhood of Bristol," and joined with much ability in the subsequent discussion as to the best mode of preventing these floods. But although he did not appear to be an invalid, Dr. Burder had, for some years, experienced at intervals feelings of angina and dyspnœa when walking uphill, or using more than ordinary exertion. On the evening of his death, after dining with some scientific friends, he walked quietly home, a distance of about half-a-mile, and immediately after entering his house complained of faintness and exhaustion, sat down in a chair, and expired, apparently without any pain or struggle. His death was quite in harmony with the even tenor of his life. On that Saturday evening, after his life's work was done, he sank quietly to his eternal rest.

At the time of his death, Dr. Burder was in his 68th year, having practised during the greater part of his life in this city, and held for many years important medical appointments. For instance, he was for twenty-seven years Physician to the Bristol General Hospital; viz., from 1856 to 1883, when he resigned, and was elected on the honorary and consulting staff. He was for twenty-three years lecturer on Materia Medica, and for nearly seventeen years Honorary Secretary, at the Bristol Medical School. Dr. Burder was also for many years a member of the Bath and Bristol Branch of the British Medical Association, and of the Bristol Medico-Chirurgical Society. He was elected President of the former Society in 1887, and of the latter in 1884. Members of the latter will not readily forget the masterly address which he then gave on the "Etiology of Catarrh," illustrated as it was by meteorological observations, made by him during a long series of years. To show that Dr. Burder was considered an authority on Meteorology many years ago, it may be mentioned that when the British Medical Association held its Annual Meeting in Clifton in 1863, Dr. Symonds being President, Dr. Burder was unanimously requested to read a paper on the Climatology of the District, and very ably he performed his task.

Dr. Burder was a Fellow of the Royal Meteorological Society, and of a similar Society in Scotland, and a member of the Bristol Naturalists' and Bristol Microscopical Societies — in fact his knowledge in other branches of Natural Science was but little inferior to his knowledge of Meteorology. Dr. Burder's death, like

Dr. Beddoe's retirement last year from Clifton and from medical practice here, leaves a gap amongst us which it is difficult to fill. They were both accomplished physicians. In a science, however, like medicine, by which men earn their daily bread, Nature abhors a vacuum, and eager aspirants soon rush in from all quarters to fill the void; but it is not so in sciences such as Anthropology and Meteorology, which men cultivate more from natural inclination than from any immediate prospect of pecuniary reward—for love, in short, rather than for money. Dr. Burder never had a very large or lucrative practice. Money-making was evidently not his forte. Modest and unassuming, he did not understand keeping well to the front, or being always in evidence, and impressing people with smart, showy, but superficial qualities, which too often pass current with the public as profound learning. But those who had the discrimination to consult him as a physician never had cause to repent having taken this step. They found in him a man who thoroughly understood the use of remedies, who had sound judgment and excellent common sense, which has been well defined to be "genius in its working dress." In him also they found a man of genial and kindly disposition, of strict honour and integrity, and of ready sympathy with others. He was one who, in the course of his life, gained many friends; but, as far as we know, never turned a temporary opponent into an enemy.

"Multis ille bonis flebilis occidit."

## International Congress of Gynæcology and Obstetrics.

The first Session of this Congress, which is to meet every four years alternately in Switzerland and Belgium, will be held in Brussels from September 14th to the 19th.

The following subjects have been chosen for discussion:

1. Pelvic Suppurations, to be introduced by Dr. P. Segond of Paris.
2. Extra-uterine Pregnancy, to be introduced by Dr. A. Martin of Berlin.
3. Placenta Prævia, to be introduced by Dr. Berry Hart of Edinburgh.

The subscription for this Congress is 30 francs, which should be sent to the Secretary-General, Dr. Jacobs, 12 Rue des Petits-Carmes, Brussels, to whom any wish to read papers at the Congress should be communicated, and from whom any further information may be obtained.

## Alvarenga Prize of the College of Physicians of Philadelphia.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about One Hundred and Eighty Dollars, will be made on July 14th, 1892. Essays intended for competition may be upon any subject in Medicine, and must be received by the Secretary of the College on or before May 1st, 1892. It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College.

CHARLES W. DULLES, *Secretary*.

## SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

**German Measles.**—The books afford very little information as to the meaning of the word German in the term German measles. Under the word German, as related to Germany, the Sydenham Society's *Lexicon* and Dr. Billings' *National Medical Dictionary* give both German measles and German silver. This no doubt expresses the usual interpretation; but it seems more reasonable to suppose that in each of these cases the word is really "germane," from the same root as germ, and used in one case to characterise a disease which is closely allied to measles and in the other to denote an alloy which bears a resemblance to silver. If this is the case, the word is used as in the expression cousins-german, and should not have a capital letter for its initial. I shall be grateful if any reader will give me information on the point.

In reference to the term cousins-german, perhaps it is needless to say that at one time cousin was a word applied to any relative and that cousins-german, or relatives closely allied, are those who are now usually called first cousins.

**Medical Philology** (I.)—Under this title I purpose from time to time citing the words having a medical significance which are to be found in the *Promptorium Parvulorum sive Clericorum, Dictionarius Anglo-Latinus princeps*, written about 1440, and in the *Catholicon Anglicum*, an English-Latin Word-book, dated 1483. These words will often afford additional instances of early authority for many modern expressions which now exist only in the vocabulary of the more ill-informed, and will also throw light on many an ancient medical theory or practice.

The *Promptorium* and the *Catholicon* have been issued by the Camden Society, and edited respectively by Mr. Albert Way and Mr. Sidney J. H. Herrtage, who have enriched the volumes by many learned annotations. There exist many MSS. and some early printed editions of the *Promptorium*. The Camden Society reprint is based upon the text of the Harleian MS. 221, but much use has been made of other versions, concerning which full particulars are given in the work The reprint of the *Catholicon* was made from a collation of a MS. belonging to Lord Monson and the British Museum Addit. MS., 15,562. The editors' notes I shall quote almost, if not quite, in full, and shall add any further illustrations I may be able to find; but,

except in the case of the *New English Dictionary* now in course of publication, this will be rarely possible, as the notes are so full and illustrative. As dictionaries are frequently quoted in these notes and are cited by the names of their compilers, it will save much repetition if I give here the short titles and dates of these works:

PALSGRAVE ... *Lesclarcissement de la Langue Francoyse.* 1530. This contains an English-French Vocabulary. The book was reprinted in 1852 in Paris.

COOPER ... *Thesaurus Linguæ Romanæ et Britannicæ.* This, a revision of Sir Thomas Elyot's Latin and English Dictionary, was first published in 1532. Second and third editions were issued in 1552 and 1565.

LEVINS ... ... *Manipulus Vocabulorum.* 1570. This was reprinted by the Camden Society in 1867, and then described as "A Dictionary of English and Latin Words, arranged in the Alphabetical order of the last Syllables."

BARET ... ... *An Alvearie or Triple Dictionarie, in Englishe, Latin, and French.* 1573. In 1580, after the death of Baret, who was M.D. of Cambridge, a second edition was published, in which Greek was added to the other languages.

FLORIO ... ... *A Worlde of Wordes, Or Most copious, and exact Dictionarie in Italian and English.* 1598. A second edition was published in 1611.

COTGRAVE ... *A Dictionarie of the French and English Tongues.* This, exceedingly rich in English synonyms, appeared first in 1611. Other editions were published in 1632, 1650, 1660, and 1673.

MINSHEU ... The first edition of Minsheu's *Ductor in Linguas*, a polyglot dictionary dealing with eleven languages, was issued in 1617. A second edition was published in 1627.

HALLIWELL... *A Dictionary of Archaic and Provincial Words*, first published in 1847, reached a ninth edition in 1878.

WEDGWOOD... The first volume of his *Dictionary of English Etymology* was issued in 1859. Other volumes followed. There was a second edition of the complete work in 1872, and a third in 1878.

The British Museum MS. of the *Catholicon* has "An **Agnayll***e*," without any Latin equivalent. This word has a curious history. In the modern English rendering of the tenth century Saxon version of the Herbarium of Apuleius given in *Leechdoms, Wortcunning, and Starcraft of Early England*, edited in 1864 by the Rev. Oswald Cockayne, is the following (Vol. I., p. 147): "For the disorder the Greeks name *παρωνυχίας*, *angnails*, take root of this same wort [*βολβὸς σκιλλητικός*, bulb of scilla maritima], pound with vinegar and with a loaf, lay it to the sore; wonderfully it healeth the same."

Mr. Herrtage's note in the *Catholicon* is:

"A sore either on the foot or hand. Palsgrave has 'an *agnayle* upon one's too,' and Baret, 'an agnaile or little corn growing upon the toes, *gemursa*, *pterigium*.' Minsheu describes it as a 'sore betweene the finger and the nail.' '*Agassin*. A corne or agnele in the feet or toes. *Frowelle*. An agnell, pinne, or warnell in the toe.' 1611. Cotgrave. 'Agnayle: *pterigium*.' Manip. Vocab. According to Wedgwood 'the real origin is Ital. *anguinaglia* (Latin *inguem*), the groin, also a botch or blain in that place; Fr. *anevenailles*. Botches, (pockie) bumps, or sores, Cotgrave.' Halliwell, *s.v.* quotes from the Med. MS. Lincoln, leaf 300, a receipt 'for *agnayls* one mans fete or womans.' Lyte, in his edition of Dodoens, 1578, p. 279, speaking of 'Git, or Nigella,' says:—'The same stieped in olde wine, or stale pisse (as Plinie saith) causeth the Cornes and *Agnayles* to fall of from the feete, if they be first scarified and scotched rounde aboute.' '*Gemursa*. A corn or lyke griefe vnder the little toe.' Cooper."

The Rev. A. S. Palmer, in *Folk-Etymology*, 1882, says:

"This word in all probability has nothing to do, as its present form would suggest, with the *nails* of the fingers (A. Sax. *angnägl* (?), pain nail). It was formerly spelt *agnel*, *agnayle*, *angnayle*, and denoted a corn on the toe, or generally any hard swelling. It is doubtless the same word as Fr. *angonailes* . . . . . It. *anguinaglia* . . . . . 'also a disease in the inside of a horse's hinder legs,' (Florio). *Anguinaglia*, as Diez shows, is for *inguinalia*, a disease or affliction of *inguine*, Lat. *inguen*, the groin or flank (Sp. *engle*, Fr. *aine*). . . . . Turner, *Herbal* [1551], speaks of '*angnaylles* and such hard swellinges,' Florio of '*agnels*, warties, almonds, or kernels growing behind the eares and in the necke' (s.v. *Páno*). 'The inner flesh or pulp [of a Gourd] is passing good for to be applied to the *agnels* or corns of the feet.' Holland, Pliny's Nat. Hist. ii. 36 (1634). '*Ghiandole, Agnels*, warties, or kernels in the throat,' Florio."

Under the words quoted by Mr. Palmer from Florio, the word "agnels" does not occur in the 1598 edition.

The Rev. W. W. Skeat, in his *Etymological Dictionary*, goes fully into the history of the word. He connects the first syllable of the word with *angina* and ἀγχόνη, respectively from *angere* and ἄγχειν, to choke, and from the Aryan root AGH or ANGH, to choke, compress, afflict, and adds that "from the same root come *anger*, *anxious*, &c.; and the notion of 'inflamed' is often expressed by 'angry.' . . . . A corn would be called an *agnail* because caused by irritation or pressure. And from the same root must also come the first syllable of the A.S. *ang-nægl*."

The *New English Dictionary*, after giving various forms of the word, says that the application has been much perverted by pseudo-etymology, and points out that the root of the second syllable in the word is from the Gothic *nagls*, which had the sense, not of "finger-nail," *unguis*, but of a nail (of iron, etc.) *clavus*, which in Latin was both a nail in that sense and a corn in the foot. The syllable *nail* was referred subsequently to a finger- or toe-nail. It quotes from a passage in *Leechdoms* (Vol. II., p. 80), which, modernised, reads thus: "For an angnail, brass filings and old soap, and oil if thou have it, if thou have it not, add cream, mingle together, lay on;" and then gives the following additional instances of the word used to signify a corn:

"'Clauus is the latin . . . In englyshe it is named cornes or agnelles in a mannes fete or toes.' Boorde, *Breuiary* II. (1552) 3. '[Aloe] heleth also agnales when they are cut of.' Turner, *Herbal* (1568), 17. 'They skinne a kybed heele, they fret an angnale off.' Turberville, *Venerie* (1575), 137."

Under the equivalent of whitlow, the *New English Dictionary* gives from Lyte's *Dodoens*, 258: "Good to be layde unto . . . . ulcered nayles, or agnayles, whiche is a paynefull swelling aboute the ioyntes and nayles." But the word is given under its wrong definition, as here "agnayles" is not a synonym for "ulcered nayles," which could not be described as "a painful swelling about the joints and nails."

Thus it may be seen that till the 17th century there is no instance of the word agnail being used to denote anything else than a hard corn, and that probably Minsheu in 1617 was the first to chronicle its perverted meaning.

Occasionally in modern literature the word has become confounded with hangnails, sometimes popularly known as back-friends, being "small pieces of partially separated skin about the roots of the finger-nails." The *New English Dictionary* quotes from *Weldon's Illustrated Dress-maker*, 1882: "This method practised daily will keep the nails in perfect preservation, also preventing agnails." The Sydenham Society's *Lexicon*, in which better things might have been expected, contents itself with defining Agnail as "a term applied to the shreds of epidermis which separate from the skin covering the root of the nails, and which, on being torn, give rise to a painful state of the fingers." In smaller recent dictionaries the word appears perverted from its original meaning. Chambers defines it as "an inflammation around the nail." Nuttall, with less circumlocution, gives "a whitlow" as its equivalent.

It is clear that the earlier signification of the word (see the quotations from Palsgrave, Cooper, Baret, and others) had nothing whatever to do with a sore near the nails, or with a blotch in the groin, and that Mr. Cockayne was not right in giving *angnails* as a gloss upon παρωνυχίας, as at the date of the Saxon version of the *Herbarium* the word would not have denoted that condition, which was undoubtedly a whitlow. Neither is he justified in giving παρωνυχία as a marginal reading to "angnail" in the quotation cited from Vol. II. of *Leechdoms*, as the section in which the word occurs is one dealing with "warty eruptions," amongst which a corn would be classed. Mr. Herrtage's own definition of the word is not quite correct.

# Editorial Note.

The readers of the *Journal* cannot fail to observe on the cover of this number an important change, which needs a few words of comment.

When the first number was issued in 1883, it had yet to be proved whether the demand for such a *Journal* would be equal to the expenditure which would necessarily be entailed: the Bristol Medico-Chirurgical Society made itself responsible for any possible deficiency, and has year by year been rewarded by a handsome surplus, which is now being utilised in the establishment of a medical library for Bristol and the West.

This result is doubtless due to the literary qualities of the *Journal* itself in conjunction with the able management it has received from the editorial and publishing staff.

The retiring Editor may be congratulated on the position which his *Journal* has obtained in the tenth year of its life: it has passed through the perils of the infantile period, and is now thriving on an established reputation. At this stage he leaves it; he has given to it nearly a decade of active supervision and original genius, and has sown the seeds which should develop into even greater products in the future. The members of the Bristol Medico-Chirurgical Society and the subscribers to the *Journal* will doubtless join in the resolution which has been adopted by the Committee of the Society expressing their regret that Mr. J. Greig Smith finds it necessary to resign his office of Editor, and their cordial thanks to him for all that he has done towards the encouragement and development of literary talent in this neighbourhood. They will wish him a continuance of that success which he has already achieved in other literary fields, and will hope to still have his assistance in the maintenance of his own offspring.

As one of the original founders of the Society under whose auspices the *Journal* is published, and its Secretary for the first fourteen years, I have naturally taken a keen interest in the welfare of all its branches, and I have been gratified at the steady expansion of its scope far beyond the limits at first contemplated. I have not been hitherto officially connected with the *Journal* staff, and therefore have no necessity on the ground of modesty to withhold commendation where it is due; I may therefore freely state my conviction that few societies have better occasion to take a pride in the position which they hold and the advantages which they give. These are to a great extent due to the *Journal* itself, which directly or indirectly has made the establishment of a really good and cosmopolitan medical library a possibility, and for which a home has been found in a Club replete with every comfort.

I hope to carry on the work on the lines on which the *Journal* is now working so satisfactorily. No radical reforms are contemplated. With the assistance of the same Editorial Committee, and of the same indefatigable Assistant-Editor, I believe that the literary repute obtained by the personal and powerful influence of my predecessor can be maintained, and no effort on my part will be wanting to render the *Journal* even more worthy of support in the future than it has been in the past.

R. SHINGLETON SMITH.